

EPA Region 5 Records Ctr.



256711

ECC

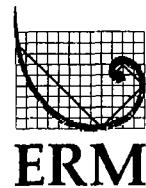
Ground Water Investigation  
Report  
*Environmental Conservation and  
Chemical Corporation Site  
Zionsville, Indiana*

**VOLUME 2 OF 2**

December 1997

Project No. 91112

Environmental Resources Management  
704 N. Deerpath Drive  
Vernon Hills, Illinois 60061



***ATTACHMENT D***

***PRELIMINARY ANALYTICAL RESULTS FROM IEA, INC.***



# American Environmental Network

3000 Weston Parkway • Cary, NC 27513 • (919) 677-0090 • Fax (919) 677-0427 • 1-800-444-9919

**AEN, Inc.**

**AEN Project No.: 1364\_226DP**

**SDG: 08367**

**Client Project ID: 91112RH**

**Data Summary Package**

IEA

**SDG NARRATIVE VOLATILE FRACTION**

PROJECT: 1364-226

BATCH: 08367

METHOD: 10/92 SOW

Samples: Four (4) Water Samples and One (1) Holding Blank

These samples were received at Industrial and Environmental Analysts, Inc. (IEA) on August 16, 1997. Each sample was assigned a 9-character "IEA" lab identification number (lab ID) and a client abbreviated sample ID for simplicity in forms generation. This package makes reference to these ID's as listed on the IEA Assigned Number Index. In addition the pH for the water samples are listed on the runlogs. All analyses were performed according to the EPA 10/92 SOW and meet the requirements of the IEA Quality Assurance Program. Please see the enclosed data package for your results and Chain of Custody (COC) documentation.

There is an air peak that is common to all of the volatile analyses and a solvent peak common to some volatile analyses. These peaks are present at the beginning of the Reconstructed Ion Chromatograms (RIC) and are labeled. These peaks are not searched as Tentatively Identified Compounds (TIC's).

Due to a low amount of space and software limitations the SOW 10/92 Form VI for the initial calibrations analyzed on MSD9 on 07/31/97 and 08/28/97 have the VSTD020 response factors left off. However the average RRF's and the %RSD's are correct. To provide the VSTD020 response factors the laboratory instrument Form VI is added to the data package.

The "J" flag used on the Form I VOA designates an estimated concentration between the Contract Required Quantitation Limit (CRQL) and the Method Detection Limit (MDL), not accounting for dilution of the sample prior to analysis. This flag is also used on the Form I VOA-TIC to indicate an estimated amount for all non-target concentrations.

The "N" flag used on the Form I VOA-TIC indicates that there is the presumptive evidence of a compound based on the mass spectral library search and the interpretation of the mass spectral interpretation specialist.

The "Y" flag is used as a qualifier on the Form I VOA-TIC to indicate a siloxane contaminant attributed to trap breakdown.

The "M" flag used on the data system report form designates that a manual integration was required to provide an accurate quantification of that analyte. Manual integrations have been initialled and dated by the analyst.

The nonconformances associated with the analysis of the samples in this case are as follows:

The storage blank for the project (HB08367) was analyzed past the method specified holding time.

IEA

SDG NARRATIVE VOLATILE FRACTION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Brian D. Neptune 09/03/97

Brian D. Neptune  
Lead Analyst, GC/MS Final Review  
IEA, Inc.

PROJECT: 1364-226

BATCH: 08367

METHOD: SOW 10/92

**Samples: Two (2) Water Samples**

The samples were received at Industrial and Environmental Analysts, Inc. (IEA) on 08/16/97. Each sample was assigned a 9-character "IEA" lab identification number (lab ID) and an abbreviated client ID which is referenced on the IEA Assigned Number Index. All analyses are performed in accordance with EPA approved methodologies and meet the requirements of the IEA Quality Assurance Program. Please see the enclosed data package for your results and Chain of Custody documentation.

The chromatographic separation of the analytes was performed using a Restek 30 X 0.32 RTX-5MS fused silica capillary column with a 0.5  $\mu\text{m}$  bonded phase film thickness.

Instrument data printouts identify the compound 2,2'-oxybis(1-Chloropropane) with CAS number 108-60-1. Alternative nomenclature for this compound is bis(2-Chloroisopropyl)ether which is included on report forms submitted.

The "J" flag used on the Form I SV indicates an estimated concentration between the CRQL and the Method Detection Limit (MDL) on column in the sample extract. This flag also identifies the estimated concentration of the non-target compounds reported on the Form I SV-TIC.

The "M" flag used on the data system report form designates that a manual integration was required to provide an accurate quantification of that analyte. Manual integrations have been initialed and dated by the analyst.

The "E" flag was used on the Form I SV in sample ECC1T1W MSD to denote that the concentration exceeded the calibration range identified in the methodology.

The compounds 3-Methylphenol and 4-Methylphenol cannot be chromatographically separated under the analytical conditions used for this methodology. For this data project, 4-Methylphenol has been reported for any samples in which possible co-elution has occurred.

Any nonconformances associated with the analysis of the samples in this case are noted as follows:

The Laboratory Control Sample (SLCS57) exhibited low surrogate recovery (2-Fluorophenol). Matrix Spike Duplicate (ECC1T1W MSD) exhibited poor surrogate recoveries for the following compounds: Terphenyl-d14, 2-Fluorophenol, and 2,4,6-Tribromophenol.

Matrix Spike/Matrix Spike Duplicate (ECC1T1W MS/MSD) percent recovery and %RPD for many of the spiking compounds exceeded the limits specified for this method due to suspected matrix interference. Due to the nature of the sample matrix, Internal Standards Acenaphthene-d10 and Perylene-d12 exhibited low area response.

Laboratory Control Sample (SLCSS7) exceeded the contract required limits for the following compounds due to poor extraction efficiency: 4-Chloroaniline, N-Nitrosodiphenylamine. Benzo(a)Pyrene exceeded the QC method limits due to low Internal Standard (Perlyene-d12) area response.

I certify that this data package is in compliance with the procedures and methods defined for this project, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data (if applicable) as submitted has been authorized by the laboratory manager or his designee, as verified by the following signature.

D. F. Morse 09/26/97

David F. Morse  
GC/MS SV Lead Analyst  
IEA, Inc.

IEA

SDG NARRATIVE PESTICIDE FRACTION

CASE:1364-226

SDG NO.:08367

CONTRACT: 10/92

Samples: (2) water samples

This case was closed on August 16, 1997. Each sample has been assigned a 9-character IEA lab identification number.

The chromatographic separation of the analytes was performed using a J & W 30 m X 0.53 mm DB-1701 fused silica capillary column with a 1.0  $\mu\text{m}$  bonded phase film thickness and a Restek 30 m X 0.53 mm RT<sub>x</sub>-35 fused silica capillary column with a 1.0  $\mu\text{m}$  bonded phase film thickness. The RT<sub>x</sub>-35 column used as one of the analytical columns is equivalent to the DB-608 column specified in the SOW.

Two significant figures were reported for the "calculated amount" on Form VII PEST-1 and -2. All of the initial pesticide chromatograms were missing the scaling factor; however, the scaling factor (in mV scale) appeared for the re-plotted chromatograms.

Florisil column cleanup was performed on all sample extracts as required by the SOW.

The "P" flag is used to designate that there is a greater than 25% difference in the detected concentration of an analyte between the two analytical columns.

The "\*" used on the Form III PEST designates percent recoveries and/or RPD's are outside the QC limits.

Any nonconformances associated with the analysis of the samples in this case are noted as follows:

The Matrix Spike/Matrix Spike Duplicate and Laboratory Control Sample recovery did not meet the advisory limits for several compounds. Due to instrument problems the extracts could not be analyzed immediately after extraction. Therefore, the spike recoveries are suspected to be low due to the length of time between extraction and analysis because the extracts require a low final volume. The samples were not re-extracted because no sample was available after the original prep.

The surrogate, Tetrachloro-m-xylene, was low on the DB-1701 column for PBLK01 and PLCS01; this surrogate was low on the RTX-35 column for ECC1T1W. The surrogate, Decachlorobiphenyl, was low on the DB-1701 column for ECC1T1WD, ECC1T1WMS/MSD and PLCS01.

The continuing performance evaluation check, PEM3G, on the DB-1701 column was high for beta-BHC due to a coeluting nontarget peak. This compound was not present in the samples. The instrument blank, PIBLK1N, on the RTX-35 column contained a peak within the retention time of Aldrin above the CRQL for this contract. Aldrin was not present in the samples.

**IEA**

**SDG NARRATIVE PESTICIDE FRACTION**

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Katrina Travis 09/26/97

**Katrina L. Travis  
GC Volatile Supervisor  
IEA, Inc.**

IEA

SDG NARRATIVE INORGANIC/METALS FRACTION

CASE: 1364\_226

SDG NO.: 08367

Samples: Three (3) Water Samples for Dissolved Metals and Cyanide Analysis.

This case was closed on August 16, 1997. The temperature of the samples upon receipt by Industrial and Environmental Analysts, Inc. (IEA) was 4°C. All samples were received intact.

Arsenic results were determined by Method 200.8.

The pH of all samples for Metals analysis was less than two (2) at the time of sample preparation. The pH of all samples for Cyanide analysis was greater than or equal to twelve (12) at the time of sample preparation.

Each sample has been assigned a 9-character IEA lab identification number. Client identifiers have been truncated to a maximum of 6 characters to accommodate the software constraints, and are cross referenced in the IEA Assigned Number Index (enclosed).

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

James E. Medlin 9/3/97

✓ James E. Medlin  
Inorganic Data Reviewer  
IEA, Inc.



**IEA**  
An Aquarion Company

**126 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60195  
PH # 708-705-0740  
FAX # 708-705-1567**

## **CHAIN OF CUSTODY RECORD**

**NO. 3323**

Page 1 of 1

**REGULATORY CLASSIFICATION - PLEASE SPECIFY**

NPDES    DRINKING WATER    RCRA    OTHER CERCLIS

COMPANY ERM-NC	CONTACT PERSON PAUL KORYDLOWSKI	PROJECT I.D. 91112RH	PHONE # (84)940-2000	FAX # (84)940-9280	P.O. # 91112																																																																		
ADDRESS 440 LAKE COOK ROAD #300		REQUESTED PARAMETERS																																																																					
CITY DEERFIELD	STATE IL	ZIPCODE 60015																																																																					
DATE # 8/14/97	TIME # 1200	SAMPLE I.D. ECLITIW	MATRIX W	OF CONTAINERS 16	PRESERVED Y																																																																		
8/14/97	1200	ECLITIWD (DUPLICATE)	W	8	Y																																																																		
8/14/97	1500	ECLITB1W (TRIP BLANK)	W	2	Y																																																																		
8/15/97	0830	ECCIT5W	W	4	Y																																																																		
<table border="1"> <thead> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>16</th> </tr> <tr> <th></th> <th>SOV</th> </tr> </thead> <tbody> <tr> <td>EXTRA VOLUME FOR MS/MS</td> <td colspan="15">1/2 l. only</td> </tr> <tr> <td colspan="16">CLP METHODS AND DATA PACKAGE REQUIRED !!</td> </tr> </tbody> </table>							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		SOV	EXTRA VOLUME FOR MS/MS	1/2 l. only															CLP METHODS AND DATA PACKAGE REQUIRED !!																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																																							
	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV	SOV																																																							
EXTRA VOLUME FOR MS/MS	1/2 l. only																																																																						
CLP METHODS AND DATA PACKAGE REQUIRED !!																																																																							
<p>Shipment →</p> <p><del>ONE SAMPLE WILL BE SHIPPED BY AIR MAIL</del></p> <p><del>ONE SAMPLE WILL BE SHIPPED BY AIR MAIL</del></p> <p><del>ONE SAMPLE WILL BE SHIPPED BY AIR MAIL</del></p>																																																																							
RELINQUISHED BY (SIGNATURE) Paul J. Korydowski	DATE / TIME 8/14/97 1500	RECEIVED BY F. Bobroch	DATE / TIME 8/16/97 1100	REMARKS ON SAMPLE RECEIPT		IEA QUOTE NO. W9708303																																																																	
X 8/15/97 1045				<input checked="" type="checkbox"/> BOTTLE INTACT	<input type="checkbox"/> CUSTODY SEALS																																																																		
				<input type="checkbox"/> PRESERVED	<input type="checkbox"/> SEALS INTACT																																																																		
				<input checked="" type="checkbox"/> CHILLED 4°C	<input type="checkbox"/> SEE REMARKS																																																																		
						IT IS USE ONLY																																																																	
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED FOR LAB BY	DATE / TIME	1364-226																																																																			
				W9708303																																																																			

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822504.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l Q

67-64-1	Acetone	4	J
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	0.3	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

**Lab Name:** IEA-NC

**Method:** SOW 10/92

**Lab Code:** IEA

**Case No.:** 1364-226

**SDG No.:** 08367

**Matrix:** (soil/water) WATER

**Lab Sample ID:** 970836701

**Sample wt/vol:** 25 (g/mL) mL

**Lab File ID:** 0822504.D

**Level:** (low/med) LOW

**Date Received:** 08/16/97

\* **Moisture:** not dec.

**Date Analyzed:** 08/22/97

**GC Column:** DB-624 **ID:** .53 (mm)

**Dilution Factor:** 1.0

**Soil Extract Volume:** (uL)

**Soil Aliquot Volume:** (uL)

**CAS NO.**

**COMPOUND**

**CONCENTRATION UNITS:**

(ug/L or ug/Kg)

**ug/l**

**Q**

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	3	
1330-20-7	Xylene (Total)	5	U

1 F

**CLIENT SAMPLE NO.**

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: IEA-NC

Method: SOW 10/92

ECC1T1W

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822504.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (mL)

Number TICs Found: 0

CONCENTRATION UNITS:  
( $\mu\text{g/L}$  or  $\mu\text{g/Kg}$ )     $\mu\text{g/l}$

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822509.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	0.2	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	0.2	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822509.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/l	
108-88-3	Toluene		1	U
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		1	U
75-01-4	Vinyl Chloride		3	
1330-20-7	Xylene (Total)		5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

Lab Name: IEA-NC

**Method:** SOW 10/92

ECC1T1WD

Lab Code : TEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822509.D

**Level:** (low/med) LOW

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

**Soil Aliquot Volume:** (uL)

Number TICs Found: 9

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1TB1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836703

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822510.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
67-64-1	Acetone	3	J
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.3	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1TB1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836703

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822510.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	Q	
			ug/l	Q
108-88-3	Toluene		1	U
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		1	U
75-01-4	Vinyl Chloride		1	U
1330-20-7	Xylene (Total)		5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

ECC1TB1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code : IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836703

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822510.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T5W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

67-64-1	Acetone	14	
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	0.2	J
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10051-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T5W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

108-88-3	Toluene	0.2	J
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	0.2	J

**LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET**  
**TENTATIVELY IDENTIFIED COMPOUNDS**

**CLIENT SAMPLE NO.**

1E

ECC1T5W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code : IEA

**Case No. : 1364-226**

SDG No.: 08367

**Matrix: (soil/water)    WATER**

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) ml

**Lab File ID:** 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

~~•~~ Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

**Soil Extract Volume:** (uL)

**Soil Aliquot Volume:** (uL)

Number TICs Found: 0

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HB08367

Lab Name: IEA-NC

Method: SOW 10/92

SDG No.: 08367

Lab Code: IEA

Case No.: 1364-226

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E10.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HB08367

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E10.D

Level: (low/med) LOW

Date Received: 08/16/97

\* Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	5	U

1E

CLIENT SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

HB08367

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No. : 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E10.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

**CONCENTRATION UNITS:**  
( $\mu\text{g}/\text{L}$  or  $\mu\text{g}/\text{Kg}$ )     $\mu\text{g}/\text{l}$

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
			Q

67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

VBLK51

Lab Name: IEA-NC

**Method:** SOW 10/92

Lab Code: IEA

**Case No.:** 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822503.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
67-64-1	Acetone	5	U	
71-43-2	Benzene	1	U	
74-97-5	Bromochloromethane	1	U	
75-27-4	Bromodichloromethane	1	U	
75-25-2	Bromoform	1	U	
74-83-9	Bromomethane	1	U	
78-93-3	2-Butanone	5	U	
75-15-0	Carbon Disulfide	1	U	
56-23-5	Carbon Tetrachloride	1	U	
108-90-7	Chlorobenzene	1	U	
75-00-3	Chloroethane	1	U	
67-66-3	Chloroform	1	U	
74-87-3	Chloromethane	1	U	
124-48-1	Dibromochloromethane	1	U	
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	
106-93-4	1,2-Dibromoethane	1	U	
95-50-1	1,2-Dichlorobenzene	1	U	
541-73-1	1,3-Dichlorobenzene	1	U	
106-46-7	1,4-Dichlorobenzene	1	U	
75-34-3	1,1-Dichloroethane	1	U	
107-06-2	1,2-Dichloroethane	1	U	
75-35-4	1,1-Dichloroethene	1	U	
156-59-2	Cis-1,2-Dichloroethene	1	U	
156-60-5	Trans-1,2-Dichloroethene	1	U	
78-87-5	1,2-Dichloropropane	1	U	
10061-01-5	Cis-1,3-Dichloropropene	1	U	
10061-02-6	Trans-1,3-Dichloropropene	1	U	
100-41-4	Ethylbenzene	1	U	
591-78-6	2-Hexanone	5	U	
75-09-2	Methylene Chloride	1	U	
108-10-1	4-Methyl-2-Pentanone	5	U	
100-42-5	Styrene	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	U	
127-18-4	Tetrachloroethene	1	U	

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822503.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

108-88-3	Toluene		1	U
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		1	U
75-01-4	Vinyl Chloride		1	U
1330-20-7	Xylene (Total)		5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822503.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SCW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822506.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

67-64-1	Acetone		5	J
71-43-2	Benzene		5	
74-97-5	Bromochloromethane		1	U
75-27-4	Bromodichloromethane		1	U
75-25-2	Bromoform		1	U
74-83-9	Bromomethane		1	U
78-93-3	2-Butanone		5	U
75-15-0	Carbon Disulfide		1	U
56-23-5	Carbon Tetrachloride		1	U
108-90-7	Chlorobenzene		4	
75-00-3	Chloroethane		2	
67-66-3	Chloroform		1	U
74-87-3	Chloromethane		1	U
124-48-1	Dibromochloromethane		1	U
96-12-8	1,2-Dibromo-3-Chloropropane		1	U
106-93-4	1,2-Dibromoethane		1	U
95-50-1	1,2-Dichlorobenzene		1	U
541-73-1	1,3-Dichlorobenzene		1	U
106-46-7	1,4-Dichlorobenzene		1	U
75-34-3	1,1-Dichloroethane		2	
107-06-2	1,2-Dichloroethane		1	U
75-35-4	1,1-Dichloroethene		5	
156-59-2	Cis-1,2-Dichloroethene		0.2	J
156-60-5	Trans-1,2-Dichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
10061-01-5	Cis-1,3-Dichloropropene		1	U
10061-02-6	Trans-1,3-Dichloropropene		1	U
100-41-4	Ethylbenzene		1	U
591-78-6	2-Hexanone		5	U
75-09-2	Methylene Chloride		0.2	J
108-10-1	4-Methyl-2-Pentanone		5	U
100-42-5	Styrene		1	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U
127-18-4	Tetrachloroethene		1	U

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822506.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-88-3	Toluene		5	
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		5	
75-01-4	Vinyl Chloride		3	
1330-20-7	Xylene (Total)		5	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822507.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

67-64-1	Acetone		5	
71-43-2	Benzene		5	
74-97-5	Bromochloromethane		1	U
75-27-4	Bromodichloromethane		1	U
75-25-2	Bromoform		1	U
74-83-9	Bromomethane		1	U
78-93-3	2-Butanone		5	U
75-15-0	Carbon Disulfide		1	U
56-23-5	Carbon Tetrachloride		1	U
108-90-7	Chlorobenzene		5	
75-00-3	Chloroethane		2	
67-66-3	Chloroform		1	U
74-87-3	Chloromethane		1	U
124-48-1	Dibromochloromethane		1	U
96-12-8	1,2-Dibromo-3-Chloropropane		1	U
106-93-4	1,2-Dibromoethane		1	U
95-50-1	1,2-Dichlorobenzene		1	U
541-73-1	1,3-Dichlorobenzene		1	U
106-46-7	1,4-Dichlorobenzene		1	U
75-34-3	1,1-Dichloroethane		2	
107-06-2	1,2-Dichloroethane		1	U
75-35-4	1,1-Dichloroethene		5	
156-59-2	Cis-1,2-Dichloroethene		0.2	J
156-60-5	Trans-1,2-Dichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
10061-01-5	Cis-1,3-Dichloropropene		1	U
10061-02-6	Trans-1,3-Dichloropropene		1	U
100-41-4	Ethylbenzene		1	U
591-78-6	2-Hexanone		5	U
75-09-2	Methylene Chloride		0.2	J
108-10-1	4-Methyl-2-Pentanone		5	U
100-42-5	Styrene		1	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U
127-18-4	Tetrachloroethene		1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822507.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l Q

108-88-3	Toluene	5	
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	5	
75-01-4	Vinyl Chloride	3	
1330-20-7	Xylene (Total)	5	U

2LCA  
LOW CONC. WATER WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

	CLIENT SAMPLE NO.	SMC1 (BFB) #	OTHER	TOT OUT
01	VBLK5T	93		0
02	ECC1T1W	93		0
03	ECC1T1W MS	99		0
04	ECC1T1W MSD	94		0
05	ECC1T1WD	99		0
06	ECC1TB1W	97		0
07	ECC1T5W	97		0
08	LCS5T	90		0
09	VBLK51	98		0
10	HB08367	104		0
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

SMC1 (BFB) = Bromofluorobenzene

QC LIMITS  
(80-120)

# Column to be used to flag recovery values

\* Values outside of QC limits.

D System Monitoring Compound diluted out

3LCA  
LOW CONC. WATER WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix Spike - Client Sample No.: ECC1T1W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	5.0	0.0	4.7	94	60-140
Trichloroethene	5.0	0.0	4.7	94	60-140
Benzene	5.0	0.0	4.9	98	60-140
Toluene	5.0	0.0	4.9	98	60-140
Chlorobenzene	5.0	0.0	4.6	92	60-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	5.0	4.9	98	4.2	20	60-140
Trichloroethene	5.0	5.1	102	8.2	20	60-140
Benzene	5.0	5.2	104	5.9	20	60-140
Toluene	5.0	5.1	102	4.0	20	60-140
Chlorobenzene	5.0	4.8	96	4.2	20	60-140

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits.

D Spike compound diluted out.

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_

3LCA  
LOW CONC. WATER VOLATILE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: LCS5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822512.D

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	SPIKE ug/l	AMOUNT ug/l	% RECOVERY	RECOVERED LIMITS
71-43-2	Benzene	5	4.2	84	60 - 140
75-25-2	Bromoform	5	4	80	60 - 140
56-23-5	Carbon Tetrachloride	5	4.2	84	60 - 140
106-93-4	1,2-Dibromoethane	5	4.2	84	60 - 140
106-46-7	1,4-Dichlorobenzene	5	3.6	72	60 - 140
107-06-2	1,2-Dichloroethane	5	3.9	78	60 - 140
78-87-5	1,2-Dichloropropane	5	4.3	86	60 - 140
10061-01-5	Cis-1,3-Dichloropropene	5	4.1	82	60 - 140
127-18-4	Tetrachloroethene	5	4.1	82	60 - 140
79-00-5	1,1,2-Trichloroethane	5	4.2	84	60 - 140
79-01-6	Trichloroethene	5	4.3	86	60 - 140
75-01-4	Vinyl Chloride	5	3.8	76	60 - 140

4LCA

## LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0829E02M.D

Lab Sample ID: VBLK51

Date Analyzed: 08/29/97

Time Analyzed: 21:57

GC Column: DB-624 ID: .53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSD5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
HB08367	970836721	0829E10.D	03:08
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

page 1 of 1

4LCA  
LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0822503.D

Lab Sample ID: VBLK5T

Date Analyzed: 08/22/97

Time Analyzed: 10:52

GC Column: DB-624 ID: .53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSDS

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 ECC1T1W	970836701	0822504.D	11:45
02 ECC1T1W MS	970836701MS	0822506.D	12:59
03 ECC1T1W MSD	970836701MSD	0822507.D	13:36
04 ECC1T1WD	970836702	0822509.D	14:50
05 ECC1TB1W	970836703	0822510.D	15:27
06 ECC1T5W	970836704	0822511.D	16:04
07 LCS5T	LCS5T	0822512.D	16:45
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_

## LOW CONC. WATER VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0822501.D

Date Analyzed: 08/22/97

Instrument ID: MSD5

Time Analyzed: 09:00

GC Column: DB-624

ID: .53 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 (DFB) AREA #	RT #
12 HOUR STD	1393539	17.99	776245	23.37	1689907	11.76
UPPER LIMIT	1950955	18.32	1086743	23.70	2365870	12.09
LOWER LIMIT	836123	17.66	465747	23.04	1013944	11.43
EPA SAMPLE NO.						
01 VBLK5T	1506296	17.98	698365	23.42	1876517	11.70
02 ECC1T1W	1470863	18.04	755774	23.44	1868169	11.75
03 ECC1T1W MS	1358399	17.99	695505	23.41	1704737	11.71
04 ECC1T1W MSD	1266683	17.99	656867	23.42	1581166	11.71
05 ECC1T1WD	1342595	17.99	665526	23.40	1629633	11.72
06 ECC1TB1W	1315854	17.98	642684	23.41	1593786	11.70
07 ECC1T5W	1466520	18.01	735037	23.44	1782081	11.71
08 LCS5T	1411753	18.01	767001	23.43	1901435	11.72
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DCB) = 1,4-Dichlorobenzene-d4

IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area

AREA LOWER LIMIT = - 40% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8B  
LOW CONC. WATER VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0829E01M.D

Date Analyzed: 08/29/97

Instrument ID: MSD5

Time Analyzed: 20:58

GC Column: DB-624

ID: .53 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 (DFB) AREA #	RT #
12 HOUR STD	471839	17.94	247218	23.37	631344	11.69
UPPER LIMIT	660575	18.27	346105	23.70	883882	12.02
LOWER LIMIT	283103	17.61	148331	23.04	378806	11.36
EPA SAMPLE NO.						
01 VBLK51	469923	17.94	222725	23.35	612883	11.68
02 HB08367	458850	17.94	217761	23.36	574917	11.64
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DCB) = 1,4-Dichlorobenzene-d4

IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area

AREA LOWER LIMIT = - 40% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

2C  
LOW CONC. WATER WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

	EPA SAMPLE NO.	S1 (NBZ)	S2 (FBP)	S3 (TPH)	S4 (PHL)	S5 (2FP)	S6 (TBP)	TOT OUT	
01	SBLK57	82	70	74	72	70	79	0	
02	SLCS57	80	71	70	0*	65	77	1	
03	ECC1T1W	65	55	24	57	53	65	0	
04	ECC1T1WD	70	54	26	61	54	62	0	
05	ECC1T1W MS	81	76	52	77	69	82	0	
06	ECC1T1W MSD	78	254*	40	0*	55	260*	3	
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

QC LIMITS	
S1 (NBZ) = Nitrobenzene-d5	(40-112)
S2 (FBP) = 2-Fluorobiphenyl	(42-110)
S3 (TPH) = Terphenyl-d14	(24-140)
S4 (PHL) = Phenol-d5	(17-113)
S5 (2FP) = 2-Fluorophenol	(16-110)
S6 (TBP) = 2,4,6-Tribromophenol	(18-126)

# Column to be used to flag recovery values

\* Values outside of QC limits.

D System Monitoring Compound diluted out

3B  
LOW CONC. WATER SEMIVOLATILE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	SPIKE ug/l	AMOUNT ug/l	% RECOVERY	RECOVERY LIMITS
108-95-2	Phenol	40	25	62	44 - 120
111-44-4	Bis(2-Chloroethyl)Ether	20	17	85	64 - 110
95-57-8	2-Chlorophenol	40	29	72	58 - 110
621-64-7	N-Nitroso-Di-N-Propylamine	20	20	100	34 - 102
67-72-1	Hexachloroethane	20	14	70	32 - 77
78-59-1	Isophorone	20	17	85	49 - 110
120-82-1	1,2,4-Trichlorobenzene	20	15	75	44 - 96
91-20-3	Naphthalene	20	16	80	56 - 160
106-47-8	4-Chloroaniline	40	4	10	35 - 98
88-06-2	2,4,6-Trichlorophenol	40	28	70	65 - 110
121-14-2	2,4-Dinitrotoluene	20	14	70	61 - 140
84-66-2	Diethylphthalate	20	14	70	76 - 104
86-30-6	N-Nitrosodiphenylamine (1)	20	2	10	35 - 120
118-74-1	Hexachlorobenzene	20	15	75	30 - 95
50-32-8	Benzo(a)Pyrene	20	27	140	55 - 95

## LOW CONC. WATER WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVE

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix Spike - Client Sample No.: ECC1T1W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	40	0	29	72	44-120
bis(2-Chloroethyl)ether	20	0	17	85	64-110
2-Chlorophenol	40	0	30	75	58-110
N-Nitroso-di-N-Prop. (1)	20	0	17	85	34-102
Hexachloroethane	20	0	15	75	32-77
Isophorone	20	0	16	80	49-110
1,2,4-Trichlorobenzene	20	0	18	90	44-96
Naphthalene	20	0	18	90	56-160
4-Chloroaniline	40	0	2	5 *	35-98
2,4,6-Trichlorophenol	40	-	29	72	65-110
2,4-Dinitrotoluene	20	0	15	75	61-140
Diethylphthalate	20	0	15	75 *	76-104
N-Nitrosodiphenylamine	20	0	16	80	35-120
Hexachlorobenzene	20	0	14	70	30-95
Benzo(a)pyrene	20	0	11	55	55-92

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	40	6	15 *	131*	42	44-120
bis(2-Chloroethyl)ether	20	15	75	12	42	64-110
2-Chlorophenol	40	14	35 *	73*	42	58-110
N-Nitroso-di-N-Prop. (1)	20	12	60	34	42	34-102
Hexachloroethane	20	13	65	14	42	32-77
Isophorone	20	17	85	6	42	49-110
1,2,4-Trichlorobenzene	20	15	75	18	42	44-96
Naphthalene	20	16	80	12	42	56-160
4-Chloroaniline	40	0	0 *	200*	42	35-98
2,4,6-Trichlorophenol	40	93	232 *	105*	42	65-110
2,4-Dinitrotoluene	20	54	270 *	113*	42	61-140
Diethylphthalate	20	33	165 *	75*	42	76-104
N-Nitrosodiphenylamine	20	0	0 *	200*	42	35-120
Hexachlorobenzene	20	11	55	24	42	30-95
Benzo(a)pyrene	20	340	1700 *	187*	42	55-92

(1) N-Nitroso-di-n-propylamine

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits.

RPD: 8 out of 15 outside limits

Spike Recovery: 10 out of 30 outside limits

COMMENTS: \_\_\_\_\_

4B  
LOW CONC. WATER SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0919604.D

Lab Sample ID: SBLK57

Instrument ID: MSD6

Date Extracted: 08/21/97

Matrix: (soil/water) WATER

Date Analyzed: 09/19/97

Level: (low/med) low

Time Analyzed: 11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01 SLCS57	SLCS57	0919605.D	09/19/97
02 ECC1TIW	970836701	0919606.D	09/19/97
03 ECC1TIWD	970836702	0919607.D	09/19/97
04 ECC1TIW MS	970836701MS	0919608.D	09/19/97
05 ECC1TIW MSD	970836701MSD	0919609.D	09/19/97
06			
07			
08			
09			
10			
11			
.2			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_

**LOW CONC. WATER SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 09186DF1.D

DFTPP Injection Date: 09/18/97

Instrument ID: MSD6

DFTPP Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 ( 0.0) 1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.2 ( 0.4) 1
127	25.0 - 75.0% of mass 198	47.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	18.0
365	Greater than 0.75% of mass 198	1.9
441	Present, but less than mass 443	7.1
442	40.0 - 110.0% of mass 198	44.0
443	15.0 - 24.0% of mass 442	8.6 ( 19.6) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 SSTD0406M	SSTD0406M	0918601.D	09/18/97	10:24
02 SSTD0406M	SSTD0406M	0918601A.D	09/18/97	10:24
03 SSTD1606M	SSTD1606M	0918602.D	09/18/97	11:17
1 SSTD1606M	SSTD1606M	0918602A.D	09/18/97	11:17
SSTD0106M	SSTD0106M	0918603.D	09/18/97	12:03
06 SSTD0106M	SSTD0106M	0918603A.D	09/18/97	12:03
07 SSTD0206M	SSTD0206M	0918604.D	09/18/97	12:50
08 SSTD0206M	SSTD0206M	0918604A.D	09/18/97	12:50
09 SSTD1006M	SSTD1006M	0918605.D	09/18/97	13:36
10 SSTD1006M	SSTD1006M	0918605A.D	09/18/97	13:36
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

5B  
**SW-846 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

**Lab Name:** IEA-NC

**Method:** 8270

**Lab Code:** IEA

**Case No.:** 1364-226

**SDG No.:** 08367

**Lab File ID:** 09186DF1.D

**DFTPP Injection Date:** 09/18/97

**Instrument ID:** MSD6

**DFTPP Injection Time:** 10:07

<b>m/e</b>	<b>ION ABUNDANCE CRITERIA</b>	<b>% RELATIVE ABUNDANCE</b>
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	40.0 - 60.0% of mass 198	47.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	18.0
365	Greater than 1.0% of mass 198	1.9
441	Present, but less than mass 443	7.1
442	Greater than 40.0% of mass 198	44.0
443	17.0 - 23.0% of mass 442	8.6 ( 19.6)2

1-Value is % mass 69

2-Value is % mass 442

**THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:**

	<b>CLIENT SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>DATE ANALYZED</b>	<b>TIME ANALYZED</b>
01	SSTD0506N	SSTD0506N	0918606.D	09/18/97	14:22
02	SSTD1606N	SSTD1606N	0918607.D	09/18/97	15:08
03	SSTD0206N	SSTD0206N	0918608.D	09/18/97	15:54
04	SSTD1206N	SSTD1206N	0918609.D	09/18/97	16:40
05	SSTD0806N	SSTD0806N	0918610.D	09/18/97	17:26
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

**LOW CONC. WATER SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE™ (DFTPP)**

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 09196DF2.D

DFTPP Injection Date: 09/19/97

Instrument ID: MSD6

DFTPP Injection Time: 08:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	32.7
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	53.0
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	25.0 - 75.0% of mass 198	46.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0 of mass 198	19.2
365	Greater than 0.75% of mass 198	2.1
441	Present, but less than mass 443	9.0
442	40.0 - 110.0% of mass 198	57.6
443	15.0 - 24.0% of mass 442	11.1 ( 19.3)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0406P	SSTD0406P	0919601.D	09/19/97	08:49
02	SSTD0406P	SSTD0406P	0919601A.D	09/19/97	08:49
03	SBLK57	SBLK57	0919604.D	09/19/97	11:16
04	SLCS57	SLCS57	0919605.D	09/19/97	12:03
05	ECC1T1W	970836701	0919606.D	09/19/97	12:50
06	ECC1T1WD	970836702	0919607.D	09/19/97	13:37
07	ECC1T1W MS	970836701MS	0919608.D	09/19/97	14:24
08	ECC1T1W MSD	970836701MSD	0919609.D	09/19/97	15:12
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
**SW-846 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 09196DF2.D

DFTPP Injection Date: 09/19/97

Instrument ID: MSD6

DFTPP Injection Time: 08:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.7
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	53.0
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	40.0 - 60.0% of mass 198	46.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0 of mass 198	19.2
365	Greater than 1.0% of mass 198	2.1
441	Present, but less than mass 443	9.0
442	Greater than 40.0% of mass 198	57.6
443	17.0 - 23.0% of mass 442	11.1 ( 19.3)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0506Q	SSTD0506Q	0919602.D	09/19/97	09:37
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

## LOW CONC. WATER SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0919601.D

Date Analyzed: 09/19/97

Instrument ID: MSD6

Time Analyzed: 08:49

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	623617	9.93	2463025	12.87	1447685	17.11
UPPER LIMIT	1247234	10.43	4926050	13.37	2895370	17.61
LOWER LIMIT	311808	9.43	1231512	12.37	723842	16.61
EPA SAMPLE NO.						
SBLK57	519925	9.94	2141826	12.86	1428573	17.11
02 SLCS57	574592	9.94	2240056	12.87	1382967	17.10
03 ECC1T1W	645632	9.94	2503053	12.86	1553403	17.11
04 ECC1T1WD	568563	9.94	2290248	12.87	1566066	17.10
05 ECC1T1W MS	569467	9.95	2135854	12.87	1396954	17.11
06 ECC1T1W MSD	613968	9.94	2236589	12.88	349982*	17.10
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C  
LOW CONC. WATER SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0919601.D

Date Analyzed: 09/19/97

Instrument ID: MSD6

Time Analyzed: 08:49

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	2735943	20.65	2007405	27.07	2227801	30.42
UPPER LIMIT	5471886	21.15	4014810	27.57	4455602	30.92
LOWER LIMIT	1367972	20.15	1003702	26.57	1113900	29.92
EPA SAMPLE NO.						
01 SBLK57	2311660	20.63	1973474	27.06	2061347	30.41
02 SLCS57	2640260	20.64	2067108	27.06	753249*	30.41
03 ECC1T1W	2546015	20.63	2136385	27.06	2109839	30.42
04 ECC1T1WD	2653787	20.64	2174510	27.06	2209894	30.43
05 ECC1T1W MS	2349113	20.63	1880072	27.06	1968407	30.43
06 ECC1T1W MSD	1931733	20.64	1012332	27.06	2905*	30.41
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

\* Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
108-95-2	Phenol	5	U	
111-44-4	Bis(2-Chloroethyl) Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy) Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	18		
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606A.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

## CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

CAS NO.	COMPOUND			
98-86-2	Acetophenone		10	U
930-55-2	N-Nitrosopyrrolidine		40	U
59-89-2	N-Nitrosomorpholine		10	U
108-39-4	3-Methylphenol		10	U
99-65-0	1,3-Dinitrobenzene		20	U
58-90-2	2,3,4,6-Tetrachlorophenol		10	U
122-39-4	Diphenylamine		10	U
23950-58-5	Pronamide		10	U
465-73-6	Isodrin		20	U
140-57-8	Aramite		50	U
510-15-6	Chlorobenzilate		10	U
53-96-3	2-Acetylaminofluorene		20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
100-51-6	Benzyl Alcohol		20	U
65-85-0	Benzoic Acid		50	U

1F

CLIE

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

**CLIENT SAMPLE NO.**

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

**Matrix:** (soil/water)    WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture:      decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs Found: 1

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
108-95-2	Phenol	5	U
111-44-4	Bis(2-Chloroethyl) Ether	5	U
95-57-8	2-Chlorophenol	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-N-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	Bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	4	J	
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607A.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
98-86-2	Acetophenone		10	U
930-55-2	N-Nitrosopyrrolidine		40	U
59-89-2	N-Nitrosomorpholine		10	U
108-39-4	3-Methylphenol		10	U
99-65-0	1,3-Dinitrobenzene		20	U
58-90-2	2,3,4,6-Tetrachlorophenol		10	U
122-39-4	Diphenylamine		10	U
23950-58-5	Pronamide		10	U
465-73-6	Isodrin		20	U
140-57-8	Aramite		50	U
510-15-6	Chlorobenzilate		10	U
53-96-3	2-Acetylaminofluorene		20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

## CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

100-51-6	Benzyl Alcohol	20	U
65-85-0	Benzoic Acid	50	U

**1F** **CLIE**  
**LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

**CLIENT SAMPLE NO.**

ECC1T1WD

**Lab Name:** IEA-NC

**Method:** SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

**Matrix:** (soil/water)    WATER

**Lab Sample ID:** 970836702

**Sample wt/vol:** 1000 (g/mL) ml

**Lab File ID:** 0919607.D

**Level:** (low/med) **LOW**

Date Received: 08/16/97

**• Moisture:**      **decanted:** (Y/N)

Date Extracted: 08/21/97

**Concentrated Extract Volume:** 1000 (uL)

Date Analyzed: 09/19/97

**Injection Volume:** 2 ( $\mu$ L)

Dilution Factor: 1.0

**GPC Cleanup:** (Y/N) N                    **pH:**

Number TICs Found: 2

**CONCENTRATION UNITS:**  
**(ug/L or ug/Kg)    ug/l**

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

CAS NO.	COMPOUND			
108-95-2	Phenol	5	U	
111-44-4	Bis(2-Chloroethyl)Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604.D

Level: (low/med) LOW

Date Received:

\* Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604A.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

## CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
98-86-2	Acetophenone		10	U
930-55-2	N-Nitrosopyrrolidine		40	U
59-89-2	N-Nitrosomorpholine		10	U
108-39-4	3-Methylphenol		10	U
99-65-0	1,3-Dinitrobenzene		20	U
58-90-2	2,3,4,6-Tetrachlorophenol		10	U
122-39-4	Diphenylamine		10	U
23950-58-5	Pronamide		10	U
465-73-6	Isodrin		20	U
140-57-8	Aramite		50	U
510-15-6	Chlorobenzilate		10	U
53-96-3	2-Acetylaminofluorene		20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604B.D

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
100-51-6	Benzyl Alcohol		20	U
65-85-0	Benzoic Acid		50	U

1F

CLIENT SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604.D

Level: (low/med) LOW

Date Received:

% Moisture:      decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs Found: 0

**CONCENTRATION UNITS:**  
**(ug/L or ug/Kg)    ug/l**

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-95-2	Phenol	25		
111-44-4	Bis(2-Chloroethyl)Ether	17		
95-57-8	2-Chlorophenol	29		
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	20		
67-72-1	Hexachloroethane	14		
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	17		
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	15		
91-20-3	Naphthalene	16		
106-47-8	4-Chloroaniline	4	J	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-MethylNaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	31		
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	14		
84-66-2	Diethylphthalate	14		
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	2	J	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	15		
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	27		
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

CAS NO.	COMPOUND		
108-95-2	Phenol	29	
111-44-4	Bis(2-Chloroethyl) Ether	17	
95-57-8	2-Chlorophenol	30	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-N-Propylamine	17	
67-72-1	Hexachloroethane	15	
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	16	
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	Bis(2-Chloroethoxy) Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	18	
91-20-3	Naphthalene	18	
106-47-8	4-Chloroaniline	2	J
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	29	
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	15		
84-66-2	Diethylphthalate	15		
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	16		
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	14		
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	19		
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	11		
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608A.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
98-86-2	Acetophenone		10	U
930-55-2	N-Nitrosopyrrolidine		40	U
59-89-2	N-Nitrosomorpholine		10	U
108-39-4	3-Methylphenol		10	U
99-65-0	1,3-Dinitrobenzene		20	U
58-90-2	2,3,4,6-Tetrachlorophenol		10	U
122-39-4	Diphenylamine		10	U
23950-58-5	Pronamide		10	U
465-73-6	Isodrin		20	U
140-57-8	Aramite		50	U
510-15-6	Chlorobenzilate		10	U
53-96-3	2-Acetylaminofluorene		20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l Q		
		20	50	U
100-51-6	Benzyl Alcohol			
65-85-0	Benzoic Acid			

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-95-2	Phenol		6	
111-44-4	Bis(2-Chloroethyl)Ether		15	
95-57-8	2-Chlorophenol		14	
541-73-1	1,3-Dichlorobenzene		5	U
106-46-7	1,4-Dichlorobenzene		5	U
95-50-1	1,2-Dichlorobenzene		5	U
95-48-7	2-Methylphenol		5	U
108-60-1	2,2'-oxybis(1-Chloropropane)		5	U
106-44-5	4-Methylphenol		1	J
621-64-7	N-Nitroso-Di-N-Propylamine		12	
67-72-1	Hexachloroethane		13	
98-95-3	Nitrobenzene		5	U
78-59-1	Isophorone		17	
88-75-5	2-Nitrophenol		5	U
105-67-9	2,4-Dimethylphenol		5	U
111-91-1	Bis(2-Chloroethoxy)Methane		5	U
120-83-2	2,4-Dichlorophenol		5	U
120-82-1	1,2,4-Trichlorobenzene		15	
91-20-3	Naphthalene		16	
106-47-8	4-Chloroaniline		5	U
87-68-3	Hexachlorobutadiene		5	U
59-50-7	4-Chloro-3-Methylphenol		5	U
91-57-6	2-Methylnaphthalene		5	U
77-47-4	Hexachlorocyclopentadiene		5	U
88-06-2	2,4,6-Trichlorophenol		93	E
95-95-4	2,4,5-Trichlorophenol		20	U
91-58-7	2-Chloronaphthalene		5	U
88-74-4	2-Nitroaniline		20	J
131-11-3	Dimethylphthalate		2	J
208-96-8	Acenaphthylene		5	U
606-20-2	2,6-Dinitrotoluene		5	U
99-09-2	3-Nitroaniline		20	U
83-32-9	Acenaphthene		5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	54		
84-66-2	Diethylphthalate	33		
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	11		
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	12		
117-84-0	Di-N-Octylphthalate	15		
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	340	E	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609A.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
98-86-2	Acetophenone	10	U
930-55-2	N-Nitrosopyrrolidine	40	U
59-89-2	N-Nitrosomorpholine	10	U
108-39-4	3-Methylphenol	10	U
99-65-0	1,3-Dinitrobenzene	20	U
58-90-2	2,3,4,6-Tetrachlorophenol	10	U
122-39-4	Diphenylamine	10	U
23950-58-5	Pronamide	10	U
465-73-6	Isodrin	20	U
140-57-8	Aramite	50	U
510-15-6	Chlorobenzilate	10	U
53-96-3	2-Acetylaminofluorene	20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
100-51-6	Benzyl Alcohol		20	U
65-85-0	Benzoic Acid		50	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	0.87	JP
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL &amp; ENVIRONMENTAL Contract: SOW 10/92

ECC1T1WMS

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

Lab Sample ID: 970836701MS Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL) Date Analyzed: 09/08/97

Injection Volume: 1.0(uL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.046	
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.058	
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.12	P
72-55-9-----	4,4'-DDE	0.12	P
72-20-8-----	Endrin	0.15	
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.049	
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.062	P
8001-35-2-----	Toxaphene	0.99	JP
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: INDUSTRIAL & ENVIRONMENTA Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836702

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000 (uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.5	P
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK01

Lab Name: INDUSTRIAL &amp; ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PBLK01

Date Received: / /

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WMSD

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MSD

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000 (uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.049	
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.064	P
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.13	P
72-55-9-----	4,4'-DDE	0.10	P
72-20-8-----	Endrin	0.15	P
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.063	P
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.068	P
8001-35-2-----	Toxaphene	1.5	P
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PLCS01

Lab Name: INDUSTRIAL &amp; ENVIRONMENTA Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PLCS01

Date Received: / /

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.030	P
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.058	P
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.12	P
72-55-9-----	4,4'-DDE	0.13	P
72-20-8-----	Endrin	0.13	P
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	P
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.0088	J
7421-93-4-----	Endrin aldehyde	0.0037	JP
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.064	P
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

**2LCC**  
**LOW CONC. WATER PESTICIDE SURROGATE RECOVERY**

**Lab Name: INDUSTRIAL & ENVIRONMENTA Contract: SOW 10/92**

**Lab Code: IEA Case No.: 1364-226**

**SDG No.: 08367**

**GC Column(1): RTX-35 ID: 0.53 (mm) GC Column(2): DB-1701 ID: 0.53 (mm)**

	<b>CLIENT SAMPLE NO.</b>	<b>TCX 1 #REC #</b>	<b>TCX 2 #REC #</b>	<b>DCB 1 #REC #</b>	<b>DCB 2 #REC #</b>	<b>OTHER (1)</b>	<b>OTHER (2)</b>	<b>TOT OUT</b>
01	PBLK01	88	52*	99	65			1
02	ECC1T1W	58*	139	84	61			1
03	ECC1T1WMS	98	126	81	56*			1
04	ECC1T1WMSSD	86	130	82	58*			1
05	ECC1T1WD	68	126	70	52*			1
06	PLCS01	90	52*	96	50*			2
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
**								
22								
23								
24								
25								
26								
27								
28								
29								
30								

**ADVISORY  
QC LIMITS**  
**TCX = Tetrachloro-m-xylene (60-150)**  
**DCB = Decachlorobiphenyl (60-150)**

# Column to be used to flag recovery values  
 \* Values outside of QC limits  
 D Surrogate diluted out

3E  
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Matrix Spike - Client Sample No.: ECC1T1W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	0.10	0.0	0.046	46*	56-123
Heptachlor epoxide	0.10	0.0	0.058	58*	74-150
Dieldrin	0.20	0.0	0.12	60	33-133
4,4'-DDE	0.20	0.0	0.020	10*	50-150
Endrin	0.20	0.0	0.15	75	56-121
Endosulfan sulfate	0.20	0.0	0.0	0*	50-100
gamma-Chlordane	0.10	0.0	0.062	62	33-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
gamma-BHC (Lindane)	0.10	0.049	49*	6	40	56-123
Heptachlor epoxide	0.10	0.064	64*	10	40	74-150
Dieldrin	0.20	0.13	65	8	40	33-133
4,4'-DDE	0.20	0.0	0*	200*	40	50-150
Endrin	0.20	0.15	75	0	40	56-121
Endosulfan sulfate	0.20	0.0	0*	0	40	50-100
gamma-Chlordane	0.10	0.068	68	9	40	33-130

Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 1 out of 7 outside limits

Spike Recovery: 8 out of 14 outside limits

COMMENTS: \_\_\_\_\_

3LCC  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PLCS01

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 080367

Lab Sample ID: PLCS01

LCS Lot No.: POC-96-062

LCS Aliquot: 1000 (uL)

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

Instrument ID(1): HP5890P3

GC Column(1):RTX-35

ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	100	23	23*	56-123
Heptachlor Epoxide	100	39	39*	74-150
Dieldrin	200	86	43	33-130
4,4'-DDE	200	90	45*	50-150
Endrin	200	93	46*	56-121
Endosulfan sulfate	200	14	7*	50-100
gamma-Chlordane	100	42	42	33-130

Instrument ID(2): HP5890P2

GC Column(2):DB-1701

ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	100	15	15*	56-123
Heptachlor Epoxide	100	29	29*	74-150
Dieldrin	200	61	30*	33-130
4,4'-DDE	200	66	33*	50-150
Endrin	200	66	33*	56-121
Endosulfan sulfate	200	10	5*	50-100
gamma-Chlordane	100	29	29*	33-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

LCS Recovery: 12 out of 14 outside limits

COMMENTS:

4LCC  
LOW CONC. WATER PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTA Contract: SOW 10/92

PBLK01

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Date Extracted: 08/21/97

Lab Sample ID: PBLK01

Date Analyzed (1): 09/08/97

Date Analyzed (2): 09/19/97

Time Analyzed (1): 1535

Time Analyzed (2): 2200

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column (1):RTX-35 ID: 0.53(mm) GC Column (2):DB-1701 ID: 0.53(mm)

Sulfur Cleanup: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01 ECC1T1W	970836701	09/08/97	09/19/97
02 ECC1T1WD	970836702	09/08/97	09/20/97
03 ECC1T1WMS	970836701MS	09/08/97	09/19/97
04 ECC1T1WMSP	970836701MSD	09/08/97	09/20/97
05 PLCS01	PLCS01	09/08/97	09/20/97
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

COMMENTS: \_\_\_\_\_

## **COVER PAGE - INORGANIC ANALYSES DATA PACKAGE**

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

**Lab Code:** IEA    **Case No.:** 1364\_226    **SAS No.:** \_\_\_\_\_    **SDG No.:** 08367

S<sup>~</sup> No.: ILM93

Were ICP interelement corrections applied? Yes/No YES

• ICP background corrections applied ? Yes/No YES  
If yes - were raw data generated before application of background corrections ? Yes/No NO

**Comments:**

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

**Signature:** Donald C. Stogner **Name:** Donald C. Stogner

Date: 9/3/97 Title: Manager, Inorganics

COVER PAGE - IN

3 / 90

## **INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

1T1WF

L Code: IEA Case No: 1364-226 SAS No.: SDG No.: 08367

Matrix (soil/water): WATER Lab Sample ID: 970836701F

**Level (low/med):** **LOW** **Date Received:** **08/16/97**

**% Solids:** \_\_\_\_\_ **0.0**

Date Received: 08/16/97

Concentration Units (ug/L or mg/kg dry weight): UG/L

**Color Before:** COLORLESS      **Clarity Before:** CLEAR      **Texture:**

**Color After:** COLORLES      **Clarity After:** CLEAR      **Artifacts:**

### **Comments:**

## **INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

1T1WDF

L: Code: IEA Case No: 1364 226 SAS No.: SDG No.: 08367

**Matrix (soil/water): WATER**      Lab Sample ID: 970836702F

**Level (low/med):** **LOW** **Date Received:** **08/16/97**

**• Solids:** \_\_\_\_\_

Date Received: 08/16/97

**Concentration Units (ug/L or mg/kg dry weight): UG/L**

**Color Before:** COLORLESS      **Clarity Before:** CLEAR      **Texture:**

**Color After:** COLORLESS      **Clarity After:** CLEAR      **Artifacts:**

**Comments:** \_\_\_\_\_

— 1 —

**FORM I - IN**

3 / 90

1

# INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Lab Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

1T5WF

I Code: IEA Case No: 1364-226 SAS No.: 33 SDG No.: 08367

**Matrix (soil/water): WATER**      Lab Sample ID: 970836704F

**Level (low/med):** LOW **Date Received:** 08/16/97

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

#### **Comments:**

I Name: INDUSTRIAL AND ENVIRONMEN Contract:

**Lab Code:** IEA      **Case No.:** 1364 226    **SAS No.:**      **SDG No.:** 08367

### **Preparation Blank Matrix (soil/water): WATER**

**Preparation Blank Concentration Units (ug/L or mg/kg): UG/L**

**5A**  
**SPIKE SAMPLE RECOVERY**

EPA SAMPLE NO.

Lab Name: INDUSTRIAL AND ENVIRONMEN

**Contract:** \_\_\_\_\_

1T1WFS

L- Code: IEA

Case No.:1364\_226 SAS No.: \_\_\_\_\_ SDG No.: 08367

SDG No.: 08367

**Matrix (soil/water): WATER**

Level (low/med): LOW

% Solids for Sample:   0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

**Comments:**

**FORM V (Part 1) - IN**

3 / 98

6  
**DUPLICATES**

EPA SAMPLE NO.

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

1T1WFD

L-<sup>1</sup> Code: IEA

Case No.: 1364-226 SAS No.: \_\_\_\_\_ SDG No.: 08367

**SDG No.: 08367**

**Matrix (soil/water): WATER**

**Level (low/med) :** LOW

**# Solids for Sample:** 0.9

% Solids for Duplicate: 6.0

**Concentration Units (ug/L or mg/kg dry weight): UG/L**



# American Environmental Network

3000 Weston Parkway • Cary, NC 27513 • (919) 677-0090 • Fax (919) 677-0427 • 1-800-444-9919

**AEN, Inc.**

**AEN Project No.: 1364\_226DP**

**SDG: 08367**

**Client Project ID: 91112RH**

**Complete Data Package**

**IEA**

**SDG NARRATIVE VOLATILE FRACTION**

**PROJECT: 1364-226**

**BATCH: 08367**

**METHOD: 10/92 SOW**

**Samples:** Four (4) Water Samples and One (1) Holding Blank

These samples were received at Industrial and Environmental Analysts, Inc. (IEA) on August 16, 1997. Each sample was assigned a 9-character "IEA" lab identification number (lab ID) and a client abbreviated sample ID for simplicity in forms generation. This package makes reference to these ID's as listed on the IEA Assigned Number Index. In addition the pH for the water samples are listed on the runlogs. All analyses were performed according to the EPA 10/92 SOW and meet the requirements of the IEA Quality Assurance Program. Please see the enclosed data package for your results and Chain of Custody (COC) documentation.

There is an air peak that is common to all of the volatile analyses and a solvent peak common to some volatile analyses. These peaks are present at the beginning of the Reconstructed Ion Chromatograms (RIC) and are labeled. These peaks are not searched as Tentatively Identified Compounds (TIC's).

Due to a low amount of space and software limitations the SOW 10/92 Form VI for the initial calibrations analyzed on MSD9 on 07/31/97 and 08/28/97 have the VSTD020 response factors left off. However the average RRF's and the %RSD's are correct. To provide the VSTD020 response factors the laboratory instrument Form VI is added to the data package.

The "J" flag used on the Form I VOA designates an estimated concentration between the Contract Required Quantitation Limit (CRQL) and the Method Detection Limit (MDL), not accounting for dilution of the sample prior to analysis. This flag is also used on the Form I VOA-TIC to indicate an estimated amount for all non-target concentrations.

The "N" flag used on the Form I VOA-TIC indicates that there is the presumptive evidence of a compound based on the mass spectral library search and the interpretation of the mass spectral interpretation specialist.

The "Y" flag is used as a qualifier on the Form I VOA-TIC to indicate a siloxane contaminant attributed to trap breakdown.

The "M" flag used on the data system report form designates that a manual integration was required to provide an accurate quantification of that analyte. Manual integrations have been initialised and dated by the analyst.

The nonconformances associated with the analysis of the samples in this case are as follows:

The storage blank for the project (HB08367) was analyzed past the method specified holding time.

IEA

SDG NARRATIVE VOLATILE FRACTION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Brian D. Neptune 09/03/97

Brian D. Neptune  
Lead Analyst, GC/MS Final Review  
IEA, Inc.

PROJECT: 1364-226

BATCH: 08367

METHOD: SOW 10/92

**Samples:** Two (2) Water Samples

The samples were received at Industrial and Environmental Analysts, Inc. (IEA) on 08/16/97. Each sample was assigned a 9-character "IEA" lab identification number (lab ID) and an abbreviated client ID which is referenced on the IEA Assigned Number Index. All analyses are performed in accordance with EPA approved methodologies and meet the requirements of the IEA Quality Assurance Program. Please see the enclosed data package for your results and Chain of Custody documentation.

The chromatographic separation of the analytes was performed using a Restek 30 X 0.32 RTX-5MS fused silica capillary column with a 0.5  $\mu$ m bonded phase film thickness.

Instrument data printouts identify the compound 2,2'-oxybis(1-Chloropropane) with CAS number 108-60-1. Alternative nomenclature for this compound is bis(2-Chloroisopropyl)ether which is included on report forms submitted.

The "J" flag used on the Form I SV indicates an estimated concentration between the CRQL and the Method Detection Limit (MDL) on column in the sample extract. This flag also identifies the estimated concentration of the non-target compounds reported on the Form I SV-TIC.

The "M" flag used on the data system report form designates that a manual integration was required to provide an accurate quantification of that analyte. Manual integrations have been initialed and dated by the analyst.

The "E" flag was used on the Form I SV in sample ECC1T1W MSD to denote that the concentration exceeded the calibration range identified in the methodology.

The compounds 3-Methylphenol and 4-Methylphenol cannot be chromatographically separated under the analytical conditions used for this methodology. For this data project, 4-Methylphenol has been reported for any samples in which possible co-elution has occurred.

Any nonconformances associated with the analysis of the samples in this case are noted as follows:

The Laboratory Control Sample (SLCS57) exhibited low surrogate recovery (2-Fluorophenol). Matrix Spike Duplicate (ECC1T1W MSD) exhibited poor surrogate recoveries for the following compounds: Terphenyl-d14, 2-Fluorophenol, and 2,4,6-Tribromophenol.

Matrix Spike/Matrix Spike Duplicate (ECC1T1W MS/MSD) percent recovery and %RPD for many of the spiking compounds exceeded the limits specified for this method due to suspected matrix interference. Due to the nature of the sample matrix, Internal Standards Acenaphthene-d10 and Perylene-d12 exhibited low area response.

Laboratory Control Sample (SLCS57) exceeded the contract required limits for the following compounds due to poor extraction efficiency: 4-Chloroaniline, N-Nitrosodiphenylamine. Benzo(a)Pyrene exceeded the QC method limits due to low Internal Standard (Perlyene-d12) area response.

I certify that this data package is in compliance with the procedures and methods defined for this project, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data (if applicable) as submitted has been authorized by the laboratory manager or his designee, as verified by the following signature.

 09/26/97

David F. Morse  
GC/MS SV Lead Analyst  
IEA, Inc.

IEA

SDG NARRATIVE PESTICIDE FRACTION

CASE:1364-226

SDG NO.:08367

CONTRACT: 10/92

Samples: (2) water samples

This case was closed on August 16, 1997. Each sample has been assigned a 9-character IEA lab identification number.

The chromatographic separation of the analytes was performed using a J & W 30 m X 0.53 mm DB-1701 fused silica capillary column with a 1.0  $\mu\text{m}$  bonded phase film thickness and a Restek 30 m X 0.53 mm RT-35 fused silica capillary column with a 1.0  $\mu\text{m}$  bonded phase film thickness. The RT-35 column used as one of the analytical columns is equivalent to the DB-608 column specified in the SOW.

Two significant figures were reported for the "calculated amount" on Form VII PEST-1 and -2. All of the initial pesticide chromatograms were missing the scaling factor; however, the scaling factor (in mV scale) appeared for the re-plotted chromatograms.

Florisil column cleanup was performed on all sample extracts as required by the SOW.

The "P" flag is used to designate that there is a greater than 25% difference in the detected concentration of an analyte between the two analytical columns.

The "\*" used on the Form III PEST designates percent recoveries and/or RPD's are outside the QC limits.

Any nonconformances associated with the analysis of the samples in this case are note as follows:

The Matrix Spike/Matrix Spike Duplicate and Laboratory Control Sample recovery did not meet the advisory limits for several compounds. Due to instrument problems the extracts could not be analyzed immediately after extraction. Therefore, the spike recoveries are suspected to be low due to the length of time between extraction and analysis because the extracts require a low final volume. The samples were not re-extracted because no sample was available after the original prep.

The surrogate, Tetrachloro-m-xylene, was low on the DB-1701 column for PBLK01 and PLCS01; this surrogate was low on the RTX-35 column for ECC1T1W. The surrogate, Decachlorobiphenyl, was low on the DB-1701 column for ECC1T1WD, ECC1T1WMS/MSD and PLCS01.

The continuing performance evaluation check, PEM3G, on the DB-1701 column was high for beta-BHC due to a coeluting nontarget peak. This compound was not present in the samples. The instrument blank, PIBLK1N, on the RTX-35 column contained a peak within the retention time of Aldrin above the CRQL for this contract. Aldrin was not present in the samples.

IEA

SDG NARRATIVE PESTICIDE FRACTION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Katrina Travis

09/26/97

Katrina L. Travis  
GC Volatile Supervisor  
IEA, Inc.

IEA

SDG NARRATIVE INORGANIC/METALS FRACTION

CASE: 1364\_226

SDG NO.: 08367

Samples: Three (3) Water Samples for Dissolved Metals and Cyanide Analysis.

This case was closed on August 16, 1997. The temperature of the samples upon receipt by Industrial and Environmental Analysts, Inc. (IEA) was 4°C. All samples were received intact.

Arsenic results were determined by Method 200.8.

The pH of all samples for Metals analysis was less than two (2) at the time of sample preparation. The pH of all samples for Cyanide analysis was greater than or equal to twelve (12) at the time of sample preparation.

Each sample has been assigned a 9-character IEA lab identification number. Client identifiers have been truncated to a maximum of 6 characters to accommodate the software constraints, and are cross referenced in the IEA Assigned Number Index (enclosed).

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

James E. Medlin 9/3/97

James E. Medlin  
Inorganic Data Reviewer  
IEA, Inc.

# CHAIN OF CUSTODY RECORD

**NO.** 3323

Page 1 of 1

## REGULATORY CLASSIFICATION - PLEASE SPECIFY

 NPDES    DRINKING WATER    RCRA    OTHER   *C122CLAS*

COMPANY	CONTACT PERSON	PROJECT I.D.	PHONE #	FAX #	P.O. #			
ERM-NC	PAUL KOPYDLOWSKI	91112RH	(847) 5140-201	(847) 5140-202	91112			
ADDRESS		REQUESTED PARAMETERS				DELIVERABLES		
540 LAKE COOK ROAD #300		MATRIX	# OF CONTAINERS	PRESERVED Y/N				
CITY	STATE	ZIP				<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush (Specify) <input checked="" type="checkbox"/> Special Request (attach specifics) <i>See Lyle &amp; Edward</i> <b>(COMMENTS)</b>		
DEERFIELD	IL	60015						
DATE	TIME	SAMPLE I.D.	W	16	Y			
1/14/97	1200	ECC1T1W	W	8	Y			
1/14/97	1200	ECC1T1WD (DUPLICATE)	W	2	Y			
1/14/97	1500	ECC1TB1W (TRSP BLANK)	W	2	Y			
1/15/97	0830	ECC1T5W	W	4	Y			
1/14/97 1200 VOL SAMPLE 1/14/97 1200 VOL SAMPLE 1/14/97 1500 PCB SAMPLES 1/15/97 0830 METALS SAMPLES FIELD FILTERED AND PRESERVED IN H2O3 CYANIDE SAMPLE PRESERVED IN H2O4								
1/14/97 1200 1/14/97 1500 1/15/97 0830 1/15/97 1045								
Shipment → Complete		ONE SAMPLE WILL BE SHIPPED IN PLASTIC CONTAINER						
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED BY	DATE / TIME	REMARKS ON SAMPLE RECEIPT			IEA QUOTE NO.	
<i>Paul J. Kopydowski</i>	1/14/97 1500	F Barcode	1/15/97 1045	<input checked="" type="checkbox"/> BOTTLE INTACT <input type="checkbox"/> PRESERVED <input checked="" type="checkbox"/> CHILLED 4°C			<input type="checkbox"/> CUSTODY SEALS <input type="checkbox"/> SEALS INTACT <input type="checkbox"/> SEE REMARKS	
IEA USE ONLY							W9708303	
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RE	VED FOR LAB BY	DATE / TIME				1364-226
								W9708303

IEA Corporation

## **Internal Chain of Custody**

Login By: HKS

Date Received: 08/16/97

**Time Received:**

**Workorder  
97-08-367**

**Case #**

## **Department**

**Location**

**Storage Return**

**Removed To/Reason**

Frac	Matrix	Sample ID
01C	WATER	ECC1T1W
01D	WATER	ECC1T1W
01E	WATER	ECC1T1W
01L	WATER	ECC1T1W MS
01M	WATER	ECC1T1W MSD
01N	WATER	ECC1T1W
02C	WATER	ECC1T1WD
02D	WATER	ECC1T1WD
02E	WATER	ECC1T1WD
03A	WATER	ECC1TB1W
03B	WATER	ECC1TB1W
04B	WATER	ECC1T5W
04C	WATER	ECC1T5W
21A	WATER	HB08367
21B	WATER	HB08367

### **Applicable Codes:**

**AN=Analyze**

**U=Login**

## DG=Digestion

AT=Autosampler

TR=Transfer

**SC=Screen**

**EX=Extraction**

**DI=Dispose**

**ST=Storage**

**DW=Dry Weight**

Verified by: *[Signature]*

Date: 9/3/97

IEA, Inc.

## **GC-GC/MS Extract Chain-of-Custody**

ESUE03

Fraction: BNA Pesticide/ Other  
(Circle One)

EPA ID: 9708367-01ms

Case No.: 1364-226

Codes: EX = Extraction  
           FL = Florisil  
           ST = Storage  
           SC = Screening  
           DI = Disposal

CO = Concentration  
GP = GPC Cleanup  
TR = Transfer  
AN = Analysis  
AT = Autosampler

Verified by: J. D. Morse Date: 9/22/97

Form: GEF00101.NC

**COPY**

IEA, Inc.

## **GC-GC/MS Extract Chain-of-Custody**

ESUEOS

Fraction: **BNA** Pesticide/ Other  
(Circle One)

EPA ID: 9708367-01nSD

Case No.: 1364-226

**Codes:** EX = Extraction  
FL = Florisil  
ST = Storage  
SC = Screening  
DI = Disposal

**CO** = Concentration  
**GP** = GPC Cleanup  
**TR** = Transfer  
**AN** = Analysis  
**AT** = Autosampler

Verified by: D. O. Mass Date: 9/22/94

Form: GEF00101.NC

**COPY**

IEA, Inc.

## GC-GC/MS Extract Chain-of-Custody

ESUE03

Fraction: BNA/ Pesticide/ Other  
(Circle One)

EPA ID: 9708367-01

Case No.: 1364-226

Codes: EX = Extraction  
 FL = Florisil  
 ST = Storage  
 SC = Screening  
 DI = Disposal

CO = Concentration  
GP = GPC Cleanup  
TR = Transfer  
AN = Analysis  
AT = Autosampler

Verified by: Dale Mouse Date: 9/22/92

Form: GEF00101.NC

**COPY**

IEA, Inc.

## **GC-GC/MS Extract Chain-of-Custody**

ESUE03

**Fraction:**  BNA/ Pesticide/ Other  
**(Circle One)**

EPA ID: 9708367-02

Case No.: - 1364-226

**Codes:** EX = Extraction  
FL = Florisil  
ST = Storage  
SC = Screening  
DI = Disposal

**CO** = Concentration  
**GP** = GPC Cleanup  
**TR** = Transfer  
**AN** = Analysis  
**AT** = Autosampler

Verified by: D. L. Morse Date: 9/22/97

**Form: GEF00101.NC**

**COPY**

EPEOS

Fraction: BNA Pesticide Other  
(Circle One)

EPA ID: 970S367-01

Case No.: 1364-226

**Codes:** EX = Extraction  
 FL = Florisil  
 ST = Storage  
 SC = Screening  
 DI = Disposal

CO = Concentration  
GP = GPC Cleanup  
TR = Transfer  
AN = Analysis  
AT = Autosampler

Verified by: AS Date: 9/26/97

EPEOB

**Fraction:** BNA Pesticide Other  
(Circle One)

EPA ID: 9703367-01ms

Case No.: 1364-226

**Codes:** EX = Extraction  
FL = Florisil  
ST = Storage  
SC = Screening  
DI = Disposal

CO = Concentration  
GP = GPC Cleanup  
TR = Transfer  
AN = Analysis  
AT = Autosampler

Verified by: JF Date: 9/26/97

EPECB

Fraction: BNA  Pesticide  Other  
(Circle One)

EPA ID: 9708367-01msdCase No.: 1364-226

SAMPLE OUT				SAMPLE IN			
Date	Time	Code	Init.	Date	Time	Location	Init.
9/5/97	FL/TR	1030 <sup>xx</sup>	EJ	8-22-97	8:00	R16	R-L
9/8/97	1100	AN	AS	9/8/97	0900	R32	LL
9/9/97	1530	AN	AS	9/9/97	1200	R32	LL
				9/9/97	1600	R32	XX

## Codes:

EX = Extraction  
FL = Florisil  
ST = Storage  
SC = Screening  
DI = Disposal

CO = Concentration  
GP = GPC Cleanup  
TR = Transfer  
AN = Analysis  
AT = Autosampler

Verified by: BS Date: 9/26/97

EPA03

Fraction: BNA / Pesticide Other  
(Circle One)EPA ID: 9703367-02Case No.: 1364-226

SAMPLE OUT				SAMPLE IN			
Date	Time	Code	Init.	Date	Time	Location	Init.
9/15/97	1030	FL/TR	EJ	9/2/97	0900	R32	XJ
9/8/97	1100	AN	AS	9/8/97	1200	R32	XJ
9/9/97	1530	AN	AS	9/9/97	1600	R32	XJ

Codes:

EX = Extraction	CO = Concentration
FL = Florisil	GP = GPC Cleanup
ST = Storage	TR = Transfer
SC = Screening	AN = Analysis
DI = Disposal	AT = Autosampler

Verified by: JK Date: 9/26/97

IEA Corporation

## **Internal Chain of Custody**

Login By: nns

Date Received: 08/16/97

**Time Received:**

Workorder #  
97-08-367

Case #  
1364 226DP

**Department**

**Location**

**Applicable Codes:**

AN=Analyze LI=Login DG=Digestion AT=Autosampler  
TR=Transfer SC=Screen EX=Extraction  
DI=Dispose ST=Storage DW=Dry Weight

Verified by: J. Meek Date: 9/3/99

IEA Corporation

## **Internal Chain of Custody**

**Login By:** MHS

Date Received: 08/16/97

**Time Received:**

---

**Workorder #**

Case #

---

**Department**

#### Location

97-08-367

1364 226DP

Frac	Matrix	Sample ID
01A	WATER	ECC1T1W
01B	WATER	ECC1T1W
01F	WATER	ECC1T1W
01G	WATER	ECC1T1W
01H	WATER	ECC1T1W
01I	WATER	ECC1T1W
01J	WATER	ECC1T1W MS/MSD
01K	WATER	ECC1T1W MS/MSD
01O	WATER	ECC1T1W MS/MSD
01P	WATER	ECC1T1W MS/MSD
02A	WATER	ECC1T1WD
02B	WATER	ECC1T1WD
02G	WATER	ECC1T1WD
02H	WATER	ECC1T1WD
02I	WATER	ECC1T1WD
04A	WATER	ECC1T5W

**Applicable Codes:**

#### **AN=Analyze**

**U=Login**

**DG=Digestion**

AT=Autosampler

TR=Transfer

SC=Screen

**EX=Extraction**

**DI=Dispose**

**ST=Storage**

DW=Dry Weight

Verified by: J. Med. L. Date: 9/3/97

**IEA Assigned Number Index**

**Case No.: 1364-226**

**SDG No.: 08367**

<b>IEA Lab Sample Number</b>	<b>Sample Number</b>	<b>Abbreviated Sample Number</b>
9708367-01	ECC1T1W	ECC1T1W
9708367-02	ECC1T1WD	ECC1T1WD
9708367-03	ECC1TB1W	ECC1TB1W
9708367-04	ECC1T5W	ECC1T5W
9708367-21	HB08367	HB08367

2LCA  
LOW CONC. WATER WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

CLIENT SAMPLE NO.	SMC1 (BFB) #	OTHER	TOT OUT
01 VBLK5T	93		0
02 ECC1T1W	93		0
03 ECC1T1W MS	99		0
04 ECC1T1W MSD	94		0
05 ECC1T1WD	99		0
06 ECC1TB1W	97		0
07 ECC1T5W	97		0
08 LCS5T	90		0
09 VBLK51	98		0
10 HB08367	104		0
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

SMC1 (BFB) = Bromofluorobenzene

QC LIMITS  
(80-120)

# Column to be used to flag recovery values

\* Values outside of QC limits.

D System Monitoring Compound diluted out

4LCA  
LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLK5T

**Lab Name:** IEA-NC      **Method:** SOW 10/92  
**Lab Code:** IEA      **Case No.:** 1364-226      **SDG No.:** 08367  
**Lab File ID:** 0822503.D      **Lab Sample ID:** VBLK5T  
**Date Analyzed:** 08/22/97      **Time Analyzed:** 10:52  
**GC Column:** DB-624      **ID:** .53 (mm)      **Heated Purge:** (Y/N) N  
**Instrument ID:** MSD5

**THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:**

	<b>CLIENT SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>TIME ANALYZED</b>
01	ECC1T1W	970836701	0822504.D	11:45
02	ECC1T1W MS	970836701MS	0822506.D	12:59
03	ECC1T1W MSD	970836701MSD	0822507.D	13:36
04	ECC1T1WD	970836702	0822509.D	14:50
05	ECC1TB1W	970836703	0822510.D	15:27
06	ECC1T5W	970836704	0822511.D	16:04
07	LCS5T	LCS5T	0822512.D	16:45
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

**COMMENTS:** \_\_\_\_\_

4LCA

## LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0829E02M.D

Lab Sample ID: VBLK51

Date Analyzed: 08/29/97

Time Analyzed: 21:57

GC Column: DB-624 ID: .53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSD5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	HB08367	970836721	0829E10.D
02			03:08
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_

5LCA  
 LOW CONC. WATER VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
 BROMOFLUOROBENZENE (BFB)

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 07315BF.D

BFB Injection Date: 07/31/97

Instrument ID: MSD5

BFB Injection Time: 07:25

GC Column: DB-624

ID: .53 (mm)

Heated Purge: N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.9
75	30.0 - 66.0% of mass 95	52.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.0 ( 0.0)1
174	50.0 - 120.0% of mass 95	78.4
175	4.0 - 9.0 % of mass 174	6.3 ( 8.4)
176	93.0 - 101.0% of mass 174	79.2 (101.0)1
177	5.0 - 9.0 of mass 176	5.0 ( 6.3)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	VSTD001	0731501.D	07/31/97	08:03
02	VSTD002	VSTD002	0731502.D	07/31/97	08:45
03	VSTD005	VSTD005	0731503.D	07/31/97	09:38
04	VSTD010	VSTD010	0731504.D	07/31/97	10:55
05	VSTD025	VSTD025	0731506.D	07/31/97	12:43
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5LCA  
LOW CONC. WATER VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 08225BF.D

BFB Injection Date: 08/22/97

Instrument ID: MSD5

BFB Injection Time: 08:19

GC Column: DB-624 ID: .53 (mm)

Heated Purge: N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.2
75	30.0 - 66.0% of mass 95	51.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.5 ( 0.7)1
174	50.0 - 120.0% of mass 95	69.1
175	4.0 - 9.0 % of mass 174	5.3 ( 7.6)1
176	93.0 - 101.0% of mass 174	69.4 (100.4)1
177	5.0 - 9.0 of mass 176	5.2 ( 7.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 VSTD005	VSTD005	0822501.D	08/22/97	09:00
02 VBLK5T	VBLK5T	0822503.D	08/22/97	10:52
03 ECC1T1W	970836701	0822504.D	08/22/97	11:45
04 ECC1T1W MS	970836701MS	0822506.D	08/22/97	12:59
05 ECC1T1W MSD	970836701MSD	0822507.D	08/22/97	13:36
06 ECC1T1WD	970836702	0822509.D	08/22/97	14:50
07 ECC1TB1W	970836703	0822510.D	08/22/97	15:27
08 ECC1T5W	970836704	0822511.D	08/22/97	16:04
09 LCS5T	LCS5T	0822512.D	08/22/97	16:45
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

SLCA  
 LOW CONC. WATER VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
 BROMOFLUOROBENZENE (BFB)

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0828EBF.D

BFB Injection Date: 08/28/97

Instrument ID: MSD5

BFB Injection Time: 20:21

GC Column: DB-624

ID: .53 (mm)

Heated Purge: N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.9
75	30.0 - 66.0% of mass 95	51.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.8
173	Less than 2.0% of mass 174	0.4 ( 0.5)1
174	50.0 - 120.0% of mass 95	68.8
175	4.0 - 9.0 % of mass 174	5.0 ( 7.1 )
176	93.0 - 101.0% of mass 174	68.5 ( 99.6 )1
177	5.0 - 9.0 of mass 176	5.1 ( 7.4 )2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	VSTD001	0828E01M.D	08/28/97	20:56
02	VSTD002	VSTD002	0828E02M.D	08/28/97	21:33
03	VSTD005	VSTD005	0828E03M.D	08/28/97	22:09
04	VSTD010	VSTD010	0828E04M.D	08/28/97	22:46
05	VSTD020	VSTD020	0828E05M.D	08/28/97	23:22
06	VSTD025	VSTD025	0828E06M.D	08/28/97	23:59
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5LCA  
LOW CONC. WATER VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0829EBF.D

BFB Injection Date: 08/29/97

Instrument ID: MSD5

BFB Injection Time: 20:23

GC Column: DB-624

ID: .53 (mm)

Heated Purge: N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.5
75	30.0 - 66.0% of mass 95	53.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 ( 0.0)1
174	50.0 - 120.0% of mass 95	69.3
175	4.0 - 9.0 % of mass 174	5.9 ( 8.5)1
176	93.0 - 101.0% of mass 174	66.7 ( 96.2)1
177	5.0 - 9.0 of mass 176	4.6 ( 6.9)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	VSTD005	0829E01M.D	08/29/97	20:58
02	VBLK51	VBLK51	0829E02M.D	08/29/97	21:57
03	HB08367	970836721	0829E10.D	08/30/97	03:08
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8B  
LOW CONC. WATER VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0822501.D

Date Analyzed: 08/22/97

Instrument ID: MSD5

Time Analyzed: 09:00

GC Column: DB-624

ID: .53 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 (DFB) AREA #	RT #
12 HOUR STD	1393539	17.99	776245	23.37	1689907	11.76
UPPER LIMIT	1950955	18.32	1086743	23.70	2365870	12.09
LOWER LIMIT	836123	17.66	465747	23.04	1013944	11.43
EPA SAMPLE NO.						
01 VBLK5T	1506296	17.98	698365	23.42	1876517	11.76
02 ECC1T1W	1470863	18.04	755774	23.44	1868169	11.75
03 ECC1T1W MS	1358399	17.99	695505	23.41	1704737	11.71
04 ECC1T1W MSD	1266683	17.99	656867	23.42	1581166	11.71
05 ECC1T1WD	1342595	17.99	665526	23.40	1629633	11.72
06 ECC1TB1W	1315854	17.98	642684	23.41	1593786	11.70
07 ECC1T5W	1466520	18.01	735037	23.44	1782081	11.71
08 LCSST	1411753	18.01	767001	23.43	1901435	11.72
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DCB) = 1,4-Dichlorobenzene-d4

IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area

AREA LOWER LIMIT = - 40% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8B  
LOW CONC. WATER VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0829E01M.D

Date Analyzed: 08/29/97

Instrument ID: MSD5

Time Analyzed: 20:58

GC Column: DB-624

ID: .53 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 (DFB) AREA #	RT #
12 HOUR STD	471839	17.94	247218	23.37	631344	11.69
UPPER LIMIT	660575	18.27	346105	23.70	883882	12.02
LOWER LIMIT	283103	17.61	148331	23.04	378806	11.36
EPA SAMPLE NO.						
1 VBLK51	469923	17.94	222725	23.35	612883	11.68
02 HB08367	458850	17.94	217761	23.36	574917	11.64
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DCB) = 1,4-Dichlorobenzene-d4

IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area

AREA LOWER LIMIT = - 40% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822504.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

CAS NO.	COMPOUND			
67-64-1	Acetone	4	J	
71-43-2	Benzene	1	U	
74-97-5	Bromochloromethane	1	U	
75-27-4	Bromodichloromethane	1	U	
75-25-2	Bromoform	1	U	
74-83-9	Bromomethane	1	U	
78-93-3	2-Butanone	5	U	
75-15-0	Carbon Disulfide	1	U	
56-23-5	Carbon Tetrachloride	1	U	
108-90-7	Chlorobenzene	1	U	
75-00-3	Chloroethane	2		
67-66-3	Chloroform	1	U	
74-87-3	Chloromethane	1	U	
124-48-1	Dibromochloromethane	1	U	
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	
106-93-4	1,2-Dibromoethane	1	U	
95-50-1	1,2-Dichlorobenzene	1	U	
541-73-1	1,3-Dichlorobenzene	1	U	
106-46-7	1,4-Dichlorobenzene	1	U	
75-34-3	1,1-Dichloroethane	2		
107-06-2	1,2-Dichloroethane	1	U	
75-35-4	1,1-Dichloroethene	1	U	
156-59-2	Cis-1,2-Dichloroethene	0.3	J	
156-60-5	Trans-1,2-Dichloroethene	1	U	
78-87-5	1,2-Dichloropropane	1	U	
10061-01-5	Cis-1,3-Dichloropropene	1	U	
10061-02-6	Trans-1,3-Dichloropropene	1	U	
100-41-4	Ethylbenzene	1	U	
591-78-6	2-Hexanone	5	U	
75-09-2	Methylene Chloride	0.2	J	
108-10-1	4-Methyl-2-Pentanone	5	U	
100-42-5	Styrene	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	U	
127-18-4	Tetrachloroethene	1	U	

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822504.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

108-88-3	Toluene		1	U
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		1	U
75-01-4	Vinyl Chloride		3	
1330-20-7	Xylene (Total)		5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

13

Lab Name: IEA-NC

**Method:** SOW 10/92

ECC1T1W

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822504.D

**Level:** (low/med) LOW

Date Received: 08/16/97

\* Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (mL)

Number TICs Found: 0

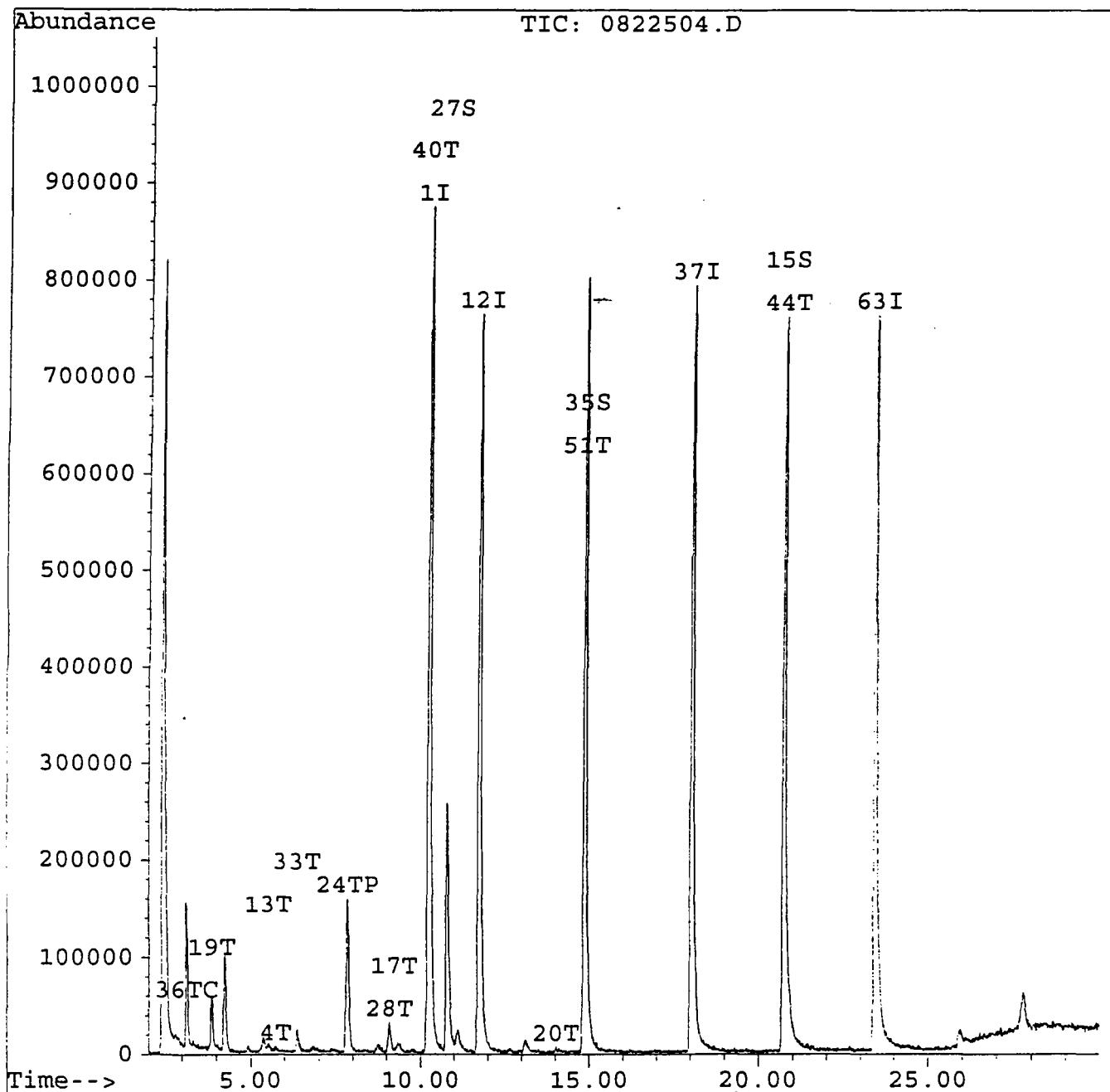
**CONCENTRATION UNITS:**  
( $\mu\text{g}/\text{L}$  or  $\mu\text{g}/\text{Kg}$ )     $\mu\text{g}/\text{l}$

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822504.D  
Acq On : 22 Aug 97 11:45 am  
Sample : 970836701 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 22 12:16 1997

Vial: 1  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation Report

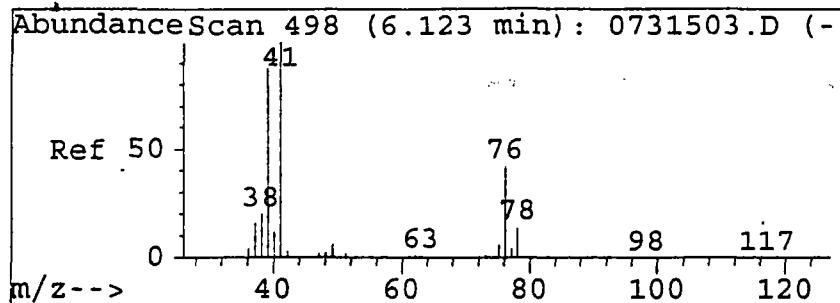
Data File : C:\HPCHEM\1\DATA\9708225.B\0822504.D  
 Acq On : 22 Aug 97 11:45 am  
 Sample : 970836701 IEA MSD5  
 Misc : WATER LOW LX  
 Quant Time: Aug 22 12:16 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

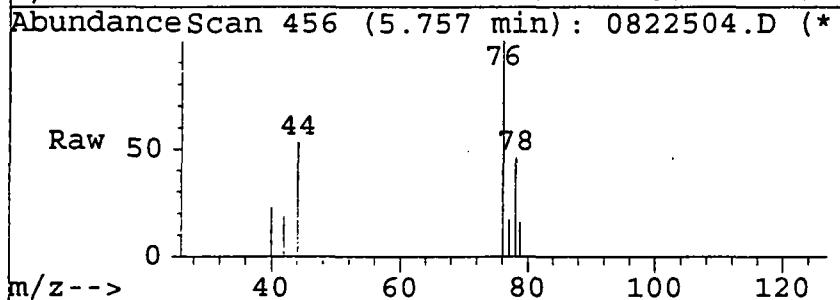
Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.25	168	1733242	5.00	µg/L	-0.02
12) 1,4-Difluorobenzene	11.75	114	1868169	5.00	µg/L	-0.01
37) Chlorobenzene-d5	18.04	117	1470863	5.00	µg/L	0.05
63) 1,4-Dichlorobenzene-d4	23.44	152	755774	5.00	µg/L	0.07
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.74	95	1060643	4.64	µg/L	92.82%
27) 1,2-Dichloroethane-d4	10.79	102	118613	4.43	µg/L	88.65%
35) Toluene-d8	14.86	98	1703956	4.67	µg/L	93.41%
<b>Target Compounds</b>						Qvalue
4) Allyl chloride	5.76	76	13016	0.25	µg/L	# 1
13) Acetone	5.53	43	28384	4.50	µg/L	/ 96
17) 2-Butanone	9.22	43	5299	0.52	µg/L	# 48
19) Chloroethane	3.88	64	110364	1.91	µg/L	/ 99
20) 2-Chloroethyl vinyl ether	14.01	63	11275	0.32	µg/L	# 48
24) 1,1-Dichloroethane	7.84	63	435027	1.88	µg/L	/ 99
28) cis-1,2-Dichloroethene	9.07	96	34819	0.26	µg/L	/ 85
33) Methylene chloride	6.36	84	26510	0.24	µg/L	/ 97
36) Vinyl chloride	3.14	62	266466	3.05	µg/L	/ 98
40) Carbon tetrachloride	10.26	117	200786	0.77	µg/L	# 3
44) cis-1,4-Dichloro-2-butene	20.74	75	557602	33.92	µg/L	# 60
51) 4-Methyl-2-pentanone	14.83	43	5011	0.45	µg/L	# 44

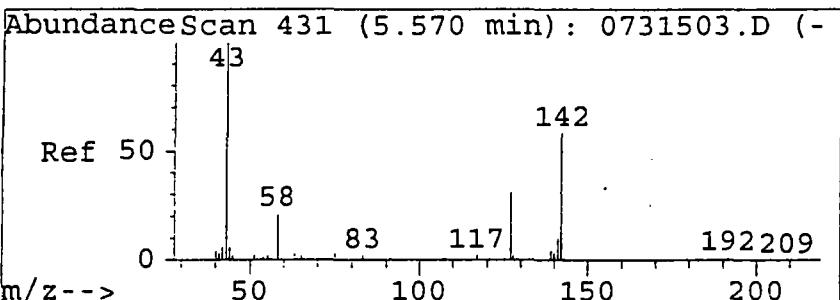
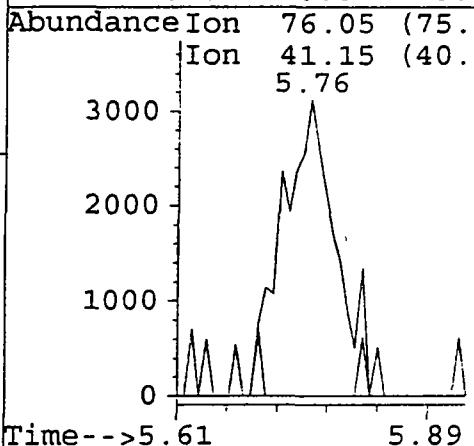
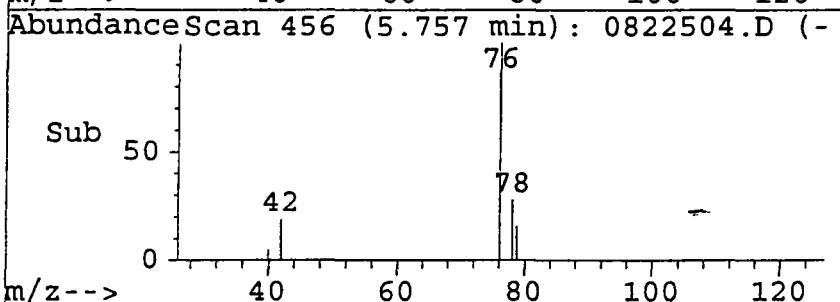
(T9117)



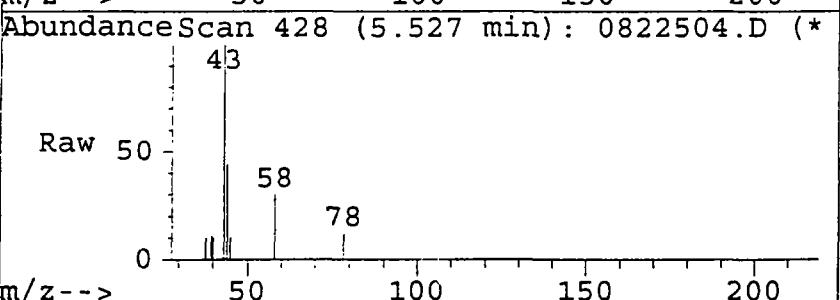
#4  
Allyl chloride  
Concen: 0.25  $\mu\text{g}/\text{L}$   
RT: 5.76 min Scan# 456  
Delta R.T. -0.40 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



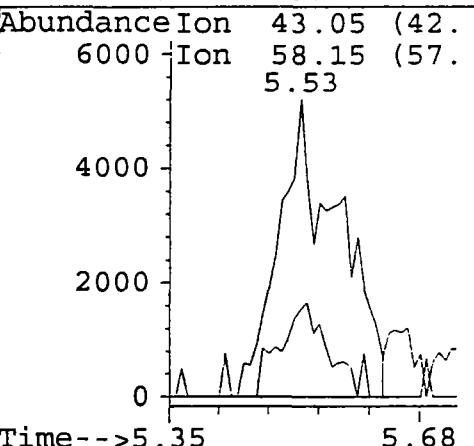
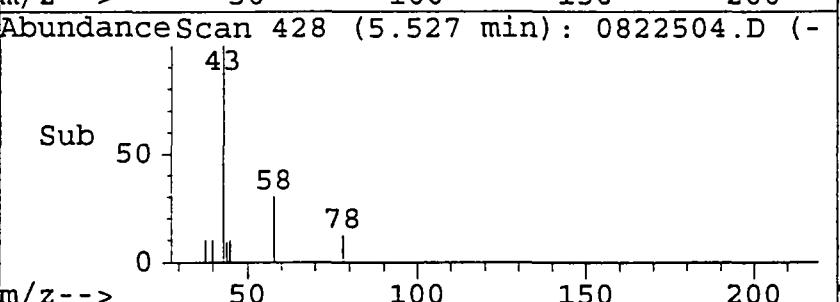
Tgt Ion: 76.05 Resp: 13016  
Ion Ratio Lower Upper  
76 100  
41 0.0 189.8 284.7#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

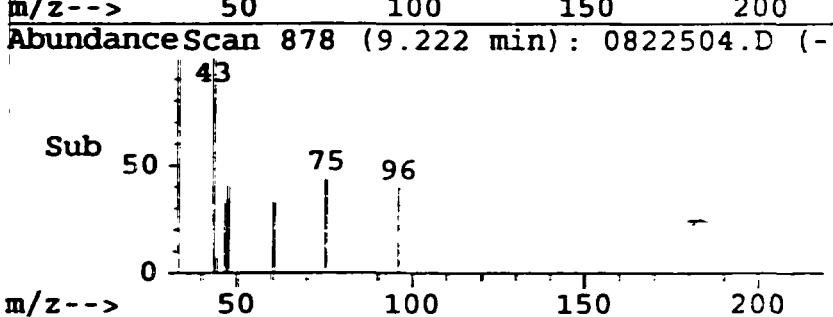
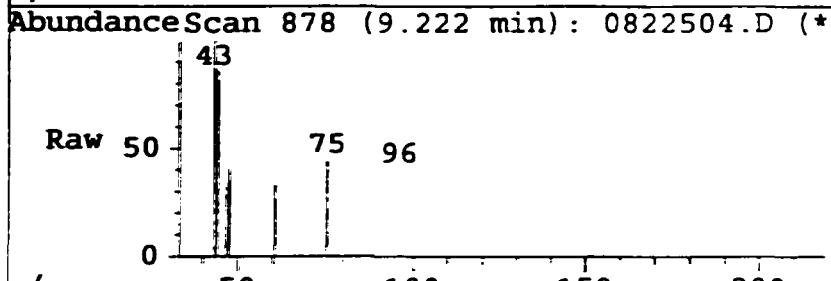
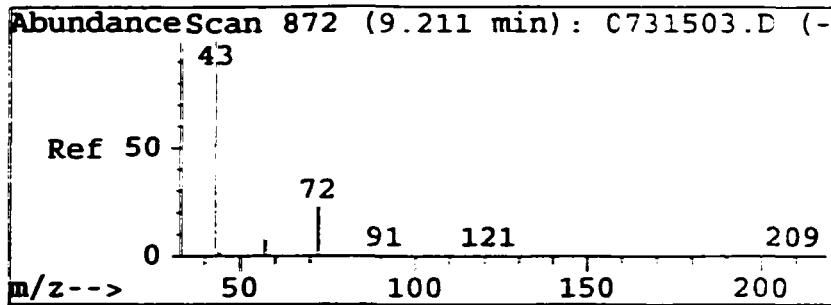


#13  
Acetone  
Concen: 4.50  $\mu\text{g}/\text{L}$   
RT: 5.53 min Scan# 428  
Delta R.T. -0.08 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



Tgt Ion: 43.05 Resp: 28384  
Ion Ratio Lower Upper  
43 100  
58 25.0 18.6 27.9  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0



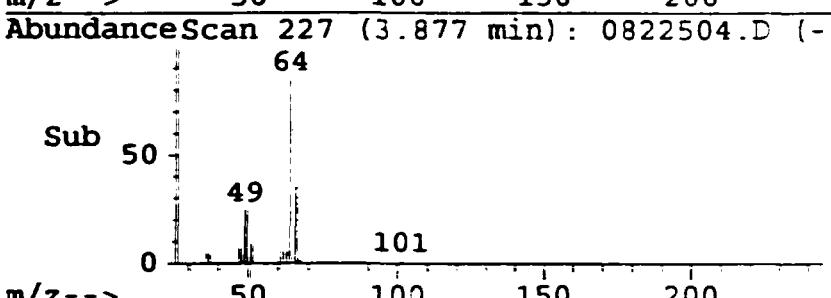
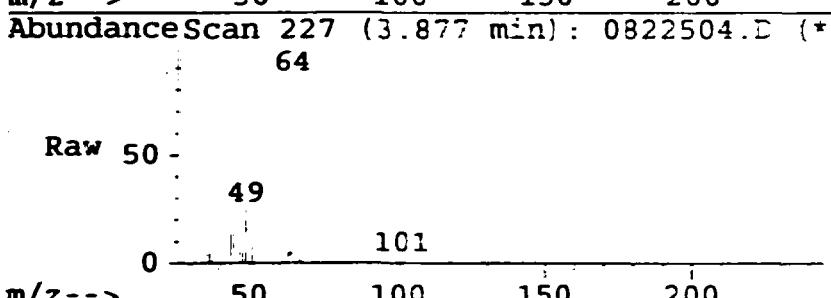
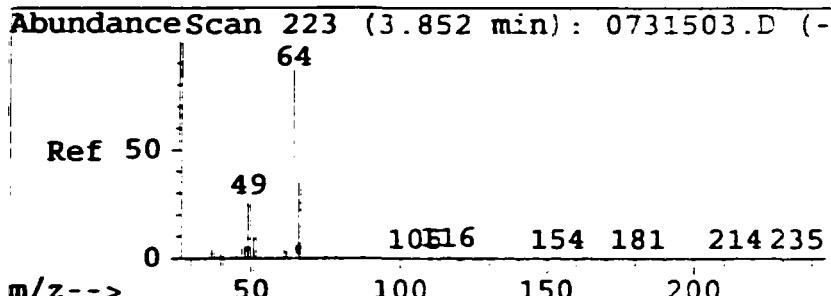
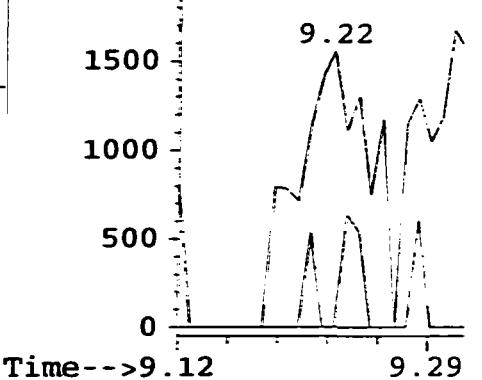


#17  
2-Butanone  
Concen: 0.52 µg/L  
RT: 9.22 min Scan# 878  
Delta R.T. 0.00 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am

Tgt Ion: 43.05 Resp: 5299

		Ion Ratio	Lower	Upper
43	100			
72	0.0	21.7	32.6#	
0	0.0	0.0	0.0	
0	0.0	0.0	0.0	

Abundance Ion 43.05 (42.2000)  
Ion 72.05 (71.1)

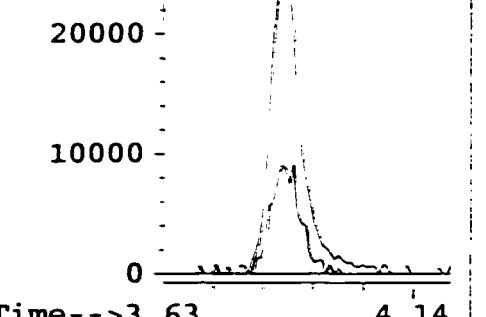


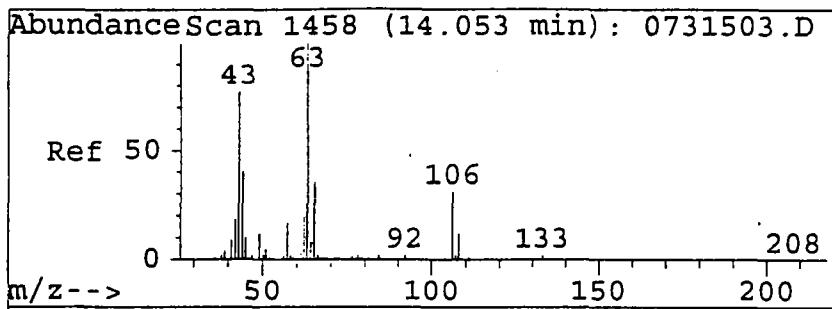
#19  
Chloroethane  
Concen: 1.91 µg/L  
RT: 3.88 min Scan# 227  
Delta R.T. -0.02 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am

Tgt Ion: 64.05 Resp: 110364

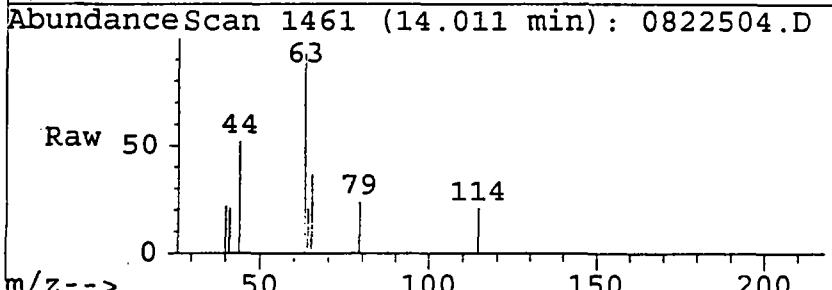
		Ion Ratio	Lower	Upper
64	100			
66	34.7	27.2	40.7	
0	0.0	0.0	0.0	
0	0.0	0.0	0.0	

Abundance Ion 64.05 (63.2000)  
Ion 66.05 (65.3.88)

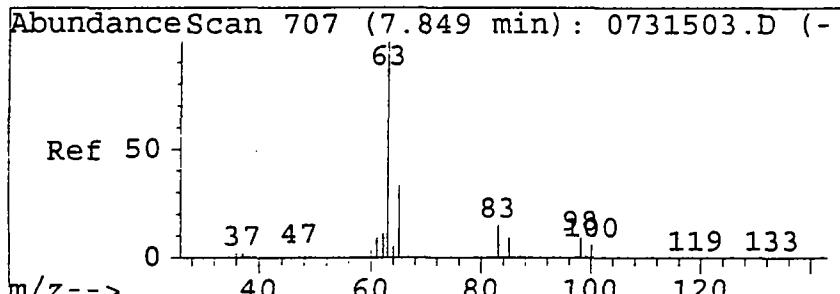
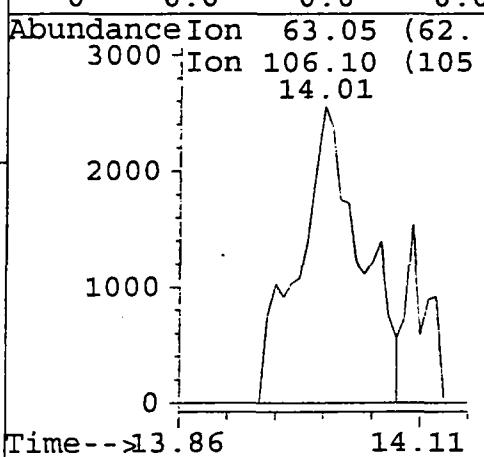
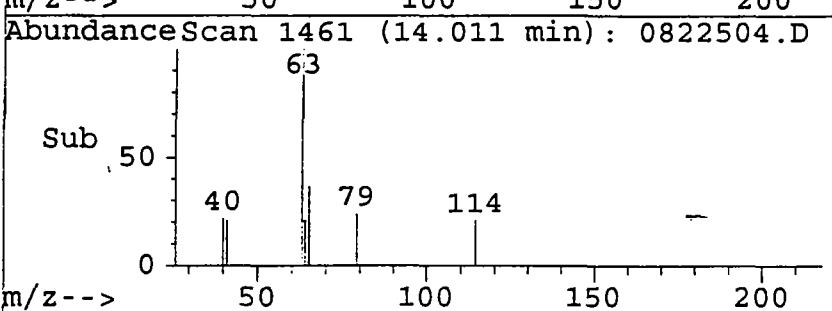




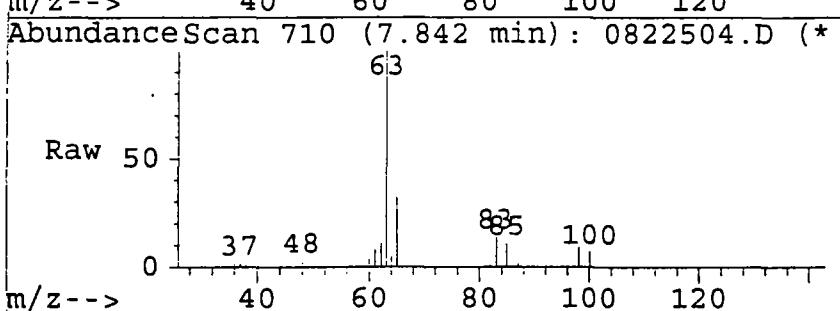
#20  
2-Chloroethyl vinyl ether  
Concen: 0.32 µg/L  
RT: 14.01 min Scan# 1461  
Delta R.T. -0.02 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



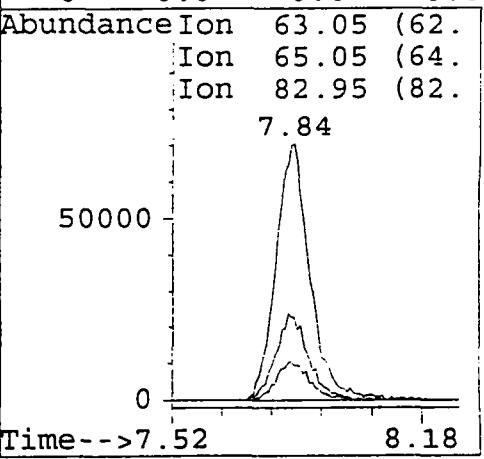
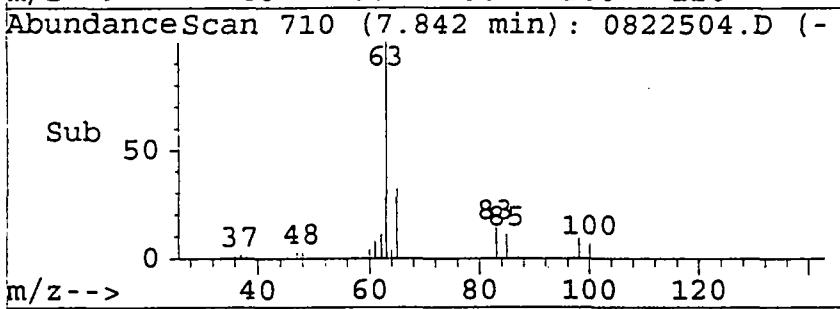
Tgt Ion: 63.05 Resp: 11275  
Ion Ratio Lower Upper  
63 100  
106 0.0 21.7 32.6#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

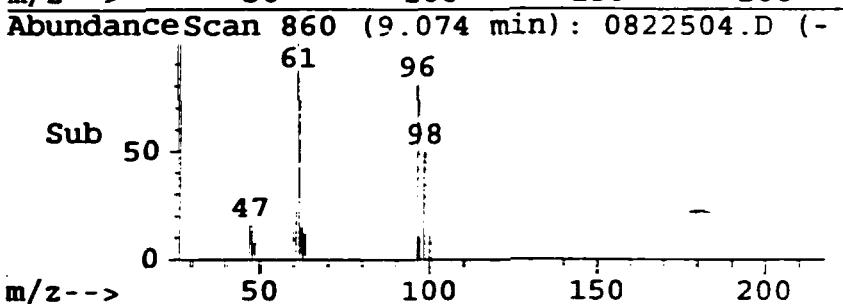
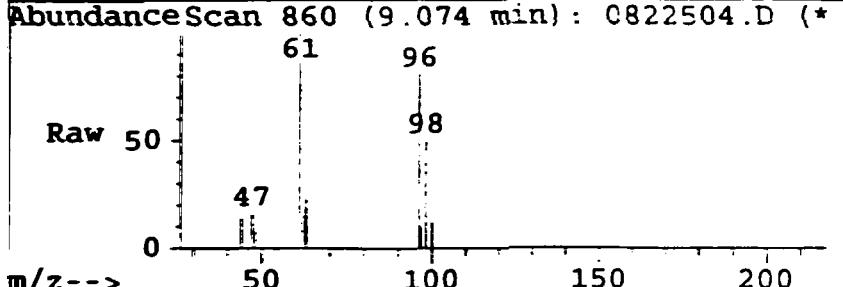
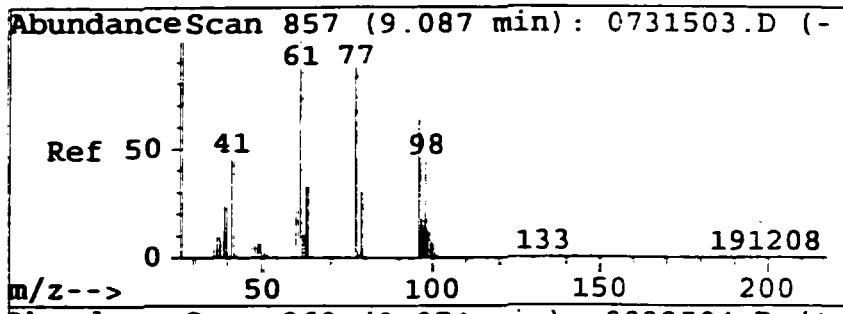


#24  
1,1-Dichloroethane  
Concen: 1.88 µg/L  
RT: 7.84 min Scan# 710  
Delta R.T. -0.02 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



Tgt Ion: 63.05 Resp: 435027  
Ion Ratio Lower Upper  
63 100  
65 32.3 26.0 38.9  
83 14.6 12.1 18.1  
0 0.0 0.0 0.0

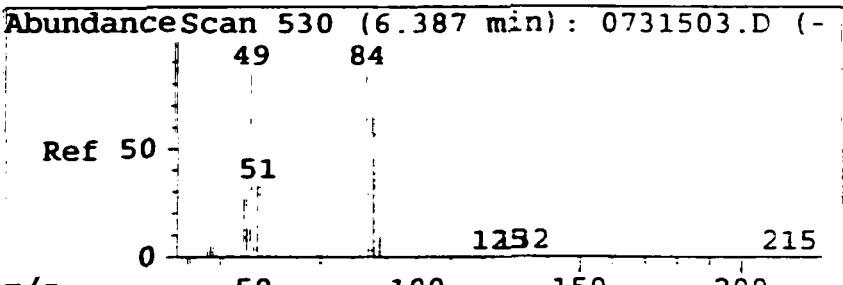
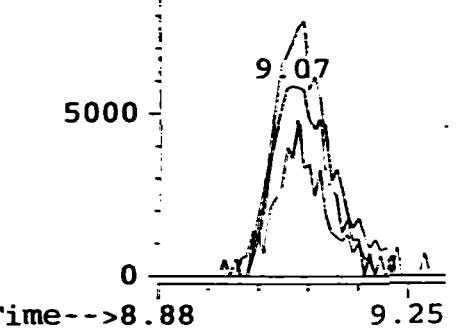




#28  
cis-1,2-Dichloroethene  
Concen: 0.26 µg/L  
RT: 9.07 min Scan# 860  
Delta R.T. -0.02 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am

Tgt Ion	Ion Ratio	Lower	Upper
96	100		
61	131.0	125.1	187.6
98	62.7	53.5	80.2
0	0.0	0.0	0.0

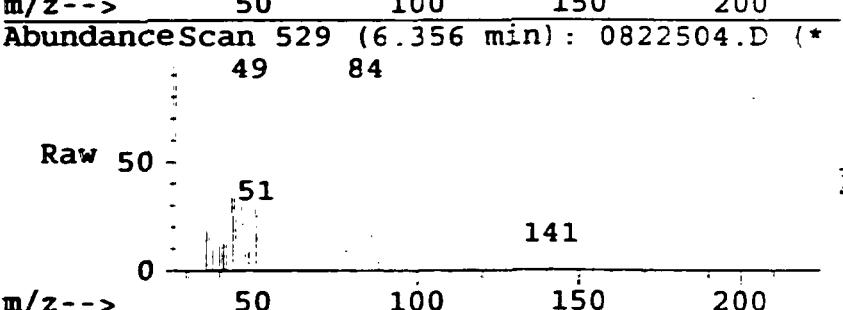
Abundance	Ion	96.00 (95.
10000	Ion	61.05 (60.
	Ion	98.00 (97.



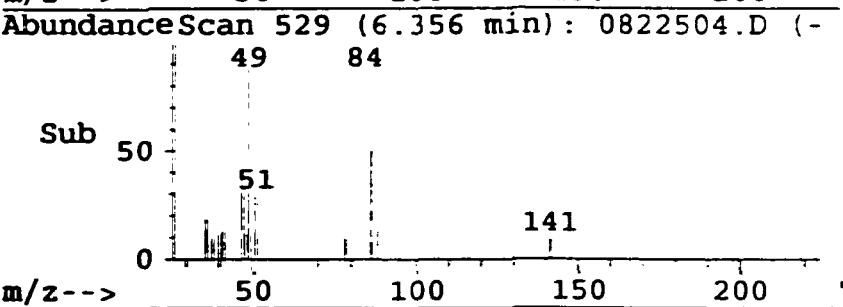
#33  
Methylene chloride  
Concen: 0.24 µg/L  
RT: 6.36 min Scan# 529  
Delta R.T. -0.06 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am

Tgt Ion	84.05	Resp:	26510
Ion Ratio	100	Lower	Upper
84	100		
86	68.7	53.5	80.2
49	118.2	91.4	137.1
0	0.0	0.0	0.0

Abundance	Ion	84.05 (83.
8000	Ion	85.95 (85.
	Ion	49.05 (48.

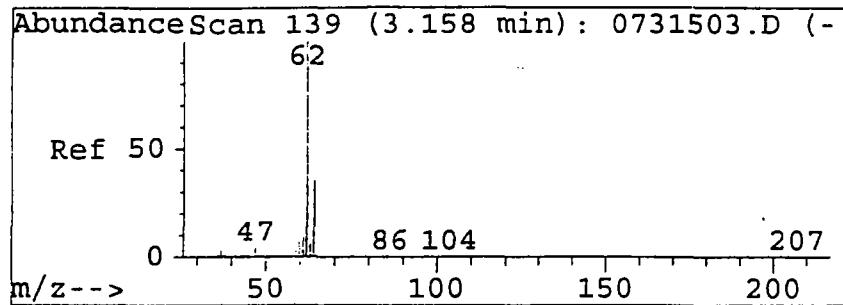


Abundance	Ion	84.05 (83.
8000	Ion	85.95 (85.
	Ion	49.05 (48.

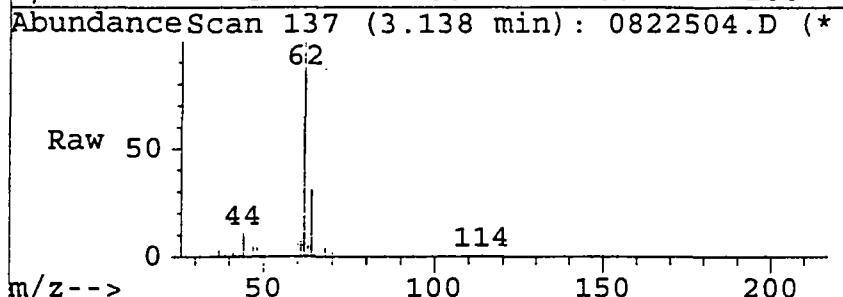


Abundance	Ion	84.05 (83.
8000	Ion	85.95 (85.
	Ion	49.05 (48.

6000 6.36  
4000  
2000  
0 6.55



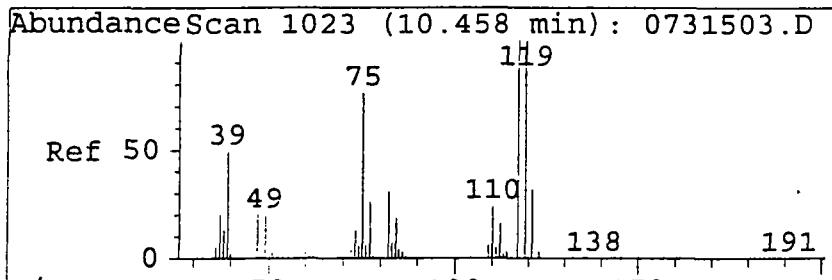
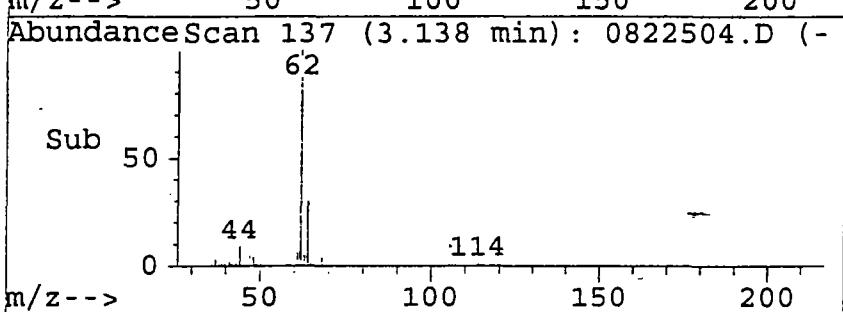
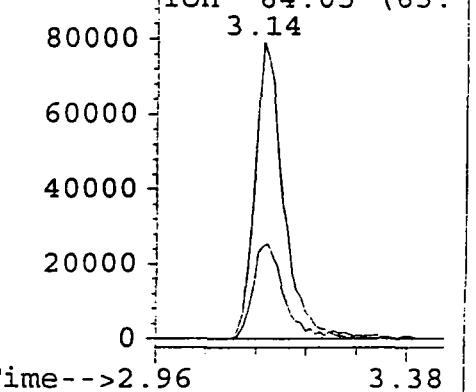
#36  
Vinyl chloride  
Concen: 3.05 µg/L  
RT: 3.14 min Scan# 137  
Delta R.T. -0.04 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



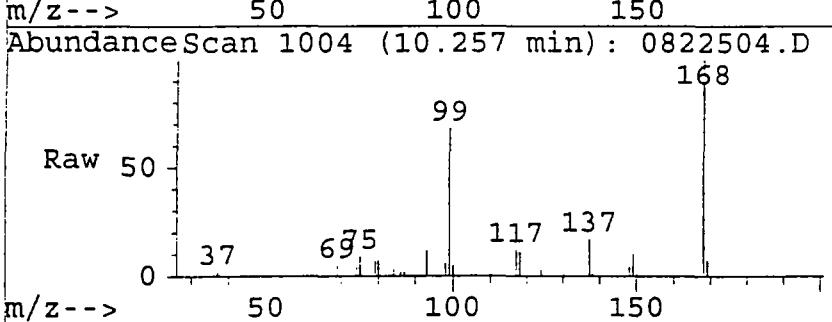
Tgt Ion: 62.05 Resp: 266466

Ion	Ratio	Lower	Upper
62	100		
64	34.9	29.0	43.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

Abundance Ion 62.05 (61.  
Ion 64.05 (63.

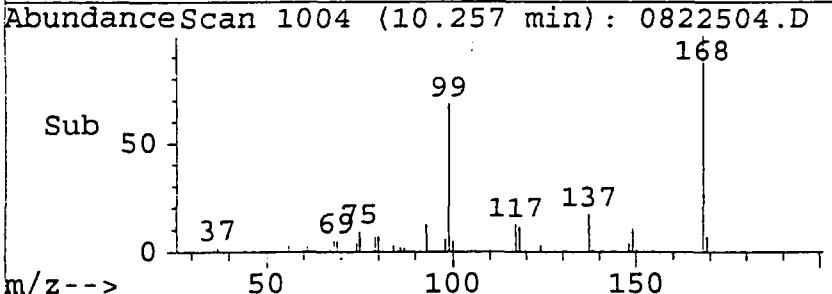
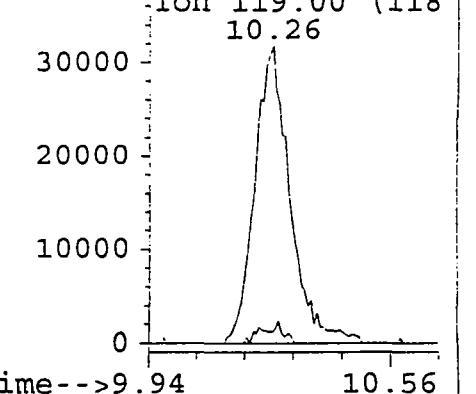


#40  
Carbon tetrachloride  
Concen: 0.77 µg/L  
RT: 10.26 min Scan# 1004  
Delta R.T. -0.21 min  
Lab File: 0822504.D  
Acq: 22 Aug 97 11:45 am



Ion	Ratio	Lower	Upper
117	100		
119	1.8	77.1	115.6#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

Abundance Ion 117.00 (116  
Ion 119.00 (118



1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822509.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	0.2	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822509.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l Q

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	3	
1330-20-7	Xylene (Total)	5	U

1E

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

Lab Name: IEA-NC

Method: SOW 10/92

ECC1T1WD

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822509.D

Level: (low/med) LOW

Date Received: 08/16/97

\* Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

**Soil Extract Volume:** (uL)

**Soil Aliquot Volume:** (uL)

Number TICs Found: 0

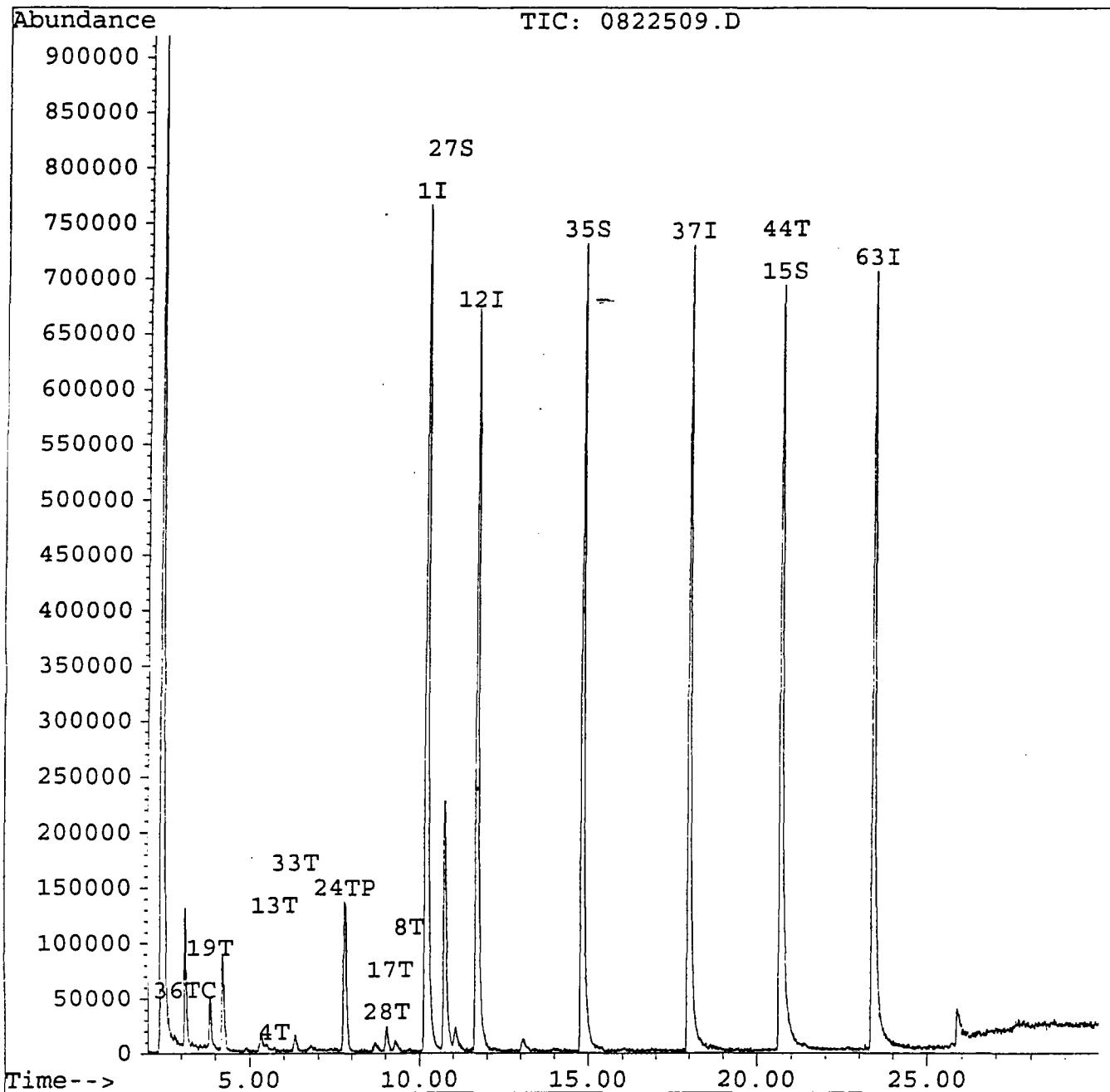
**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822509.D  
Acq On : 22 Aug 97 2:50 pm  
Sample : 970836702 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug. 22 15:21 1997

Vial: 6  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822509.D  
 Acq On : 22 Aug 97 2:50 pm  
 Sample : 970836702 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 15:21 1997

Vial: 6  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

1364-2200  
 cur 9/3

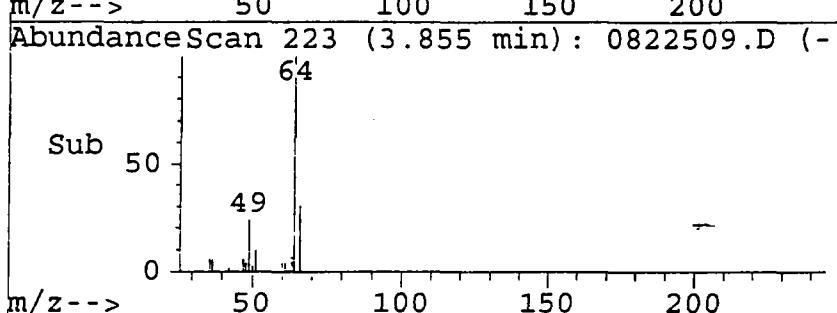
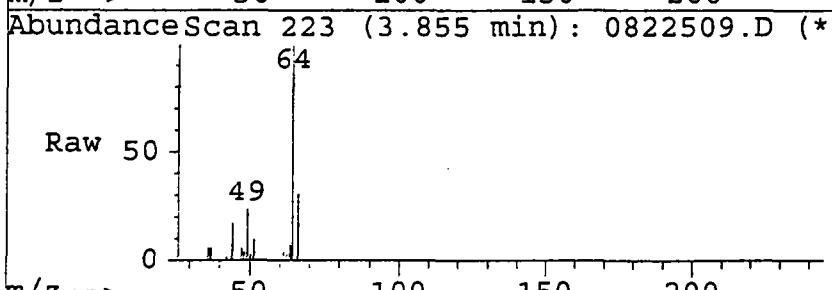
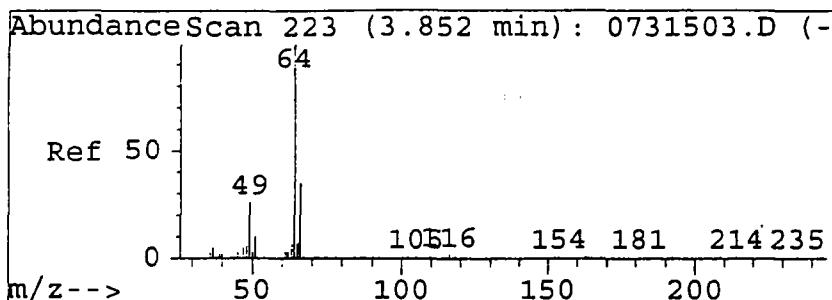
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.21	168	1511709	5.00	µg/L	-0.06
12) 1,4-Difluorobenzene	11.72	114	1629633	5.00	µg/L	-0.04
37) Chlorobenzene-d5	17.99	117	1342595	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.40	152	665526	5.00	µg/L	0.03
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.69	95	989707	4.96	µg/L	99.29%
27) 1,2-Dichloroethane-d4	10.74	102	101623	4.35	µg/L	87.07%
35) Toluene-d8	14.81	98	1537259	4.83	µg/L	96.61%
<b>Target Compounds</b>						Qvalue
4) Allyl chloride	5.73	76	7275	0.16	µg/L	# 1
8) Methacrylonitrile	9.69	41	2217	0.15	µg/L	# 33
13) Acetone	5.75	43	1036	0.19	µg/L	# 1
17) 2-Butanone	9.14	43	2435	0.28	µg/L	# 48
19) Chloroethane	3.85	64	96397	1.91	µg/L	99
24) 1,1-Dichloroethane	7.79	63	382756	1.90	µg/L	# 94
28) cis-1,2-Dichloroethene	9.04	96	26256	0.23	µg/L	83
33) Methylene chloride	6.33	84	18604	0.19	µg/L	96
36) Vinyl chloride	3.13	62	238095	3.13	µg/L	98
44) cis-1,4-Dichloro-2-butene	20.70	75	530451	35.36	µg/L	# 60

At 11:11 AM

(#) = qualifier out of range (m) = manual integration

0822509.D M691.M Fri Aug 22 15:21:31 1997 MSD5

Page 1

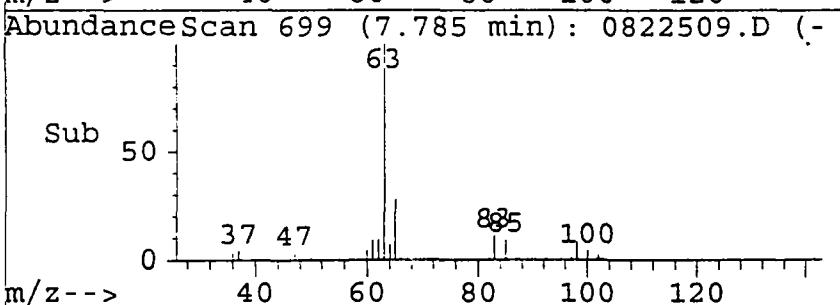
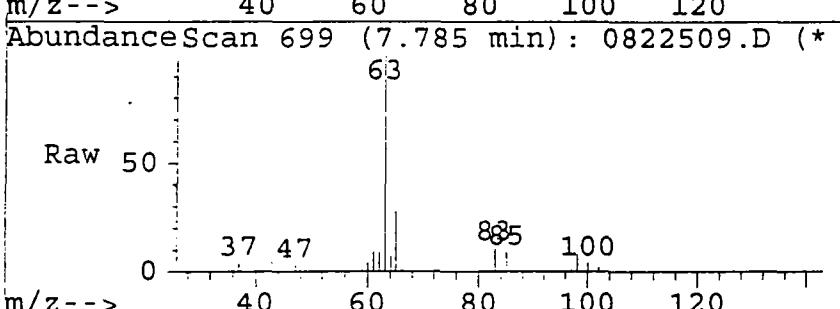
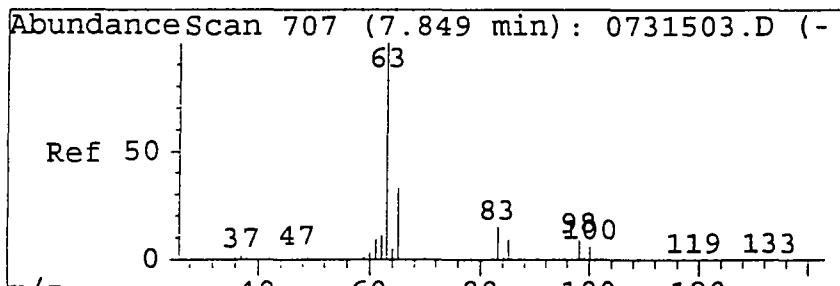
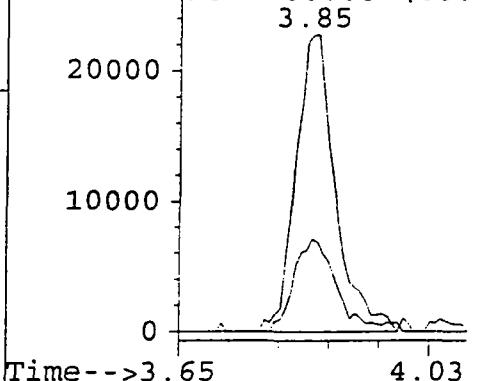


#19  
Chloroethane  
Concen: 1.91 µg/L  
RT: 3.85 min Scan# 223  
Delta R.T. -0.04 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm

Tgt Ion: 64.05 Resp: 96397

		Ion Ratio	Lower	Upper
64	100			
66	33.2	27.2	40.7	
0	0.0	0.0	0.0	
0	0.0	0.0	0.0	

Abundance Ion 64.05 (63.  
Ion 66.05 (65.

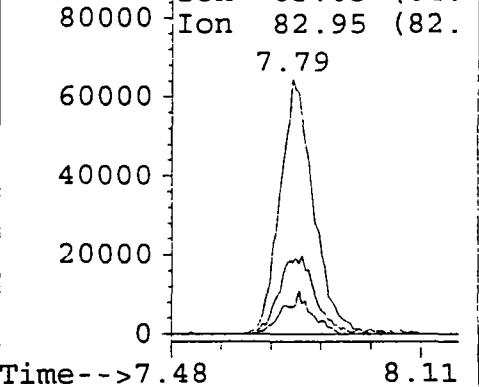


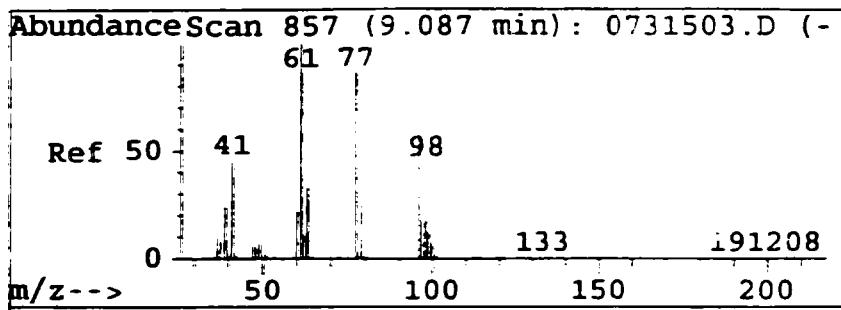
#24  
1,1-Dichloroethane  
Concen: 1.90 µg/L  
RT: 7.79 min Scan# 699  
Delta R.T. -0.08 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm

Tgt Ion: 63.05 Resp: 382756

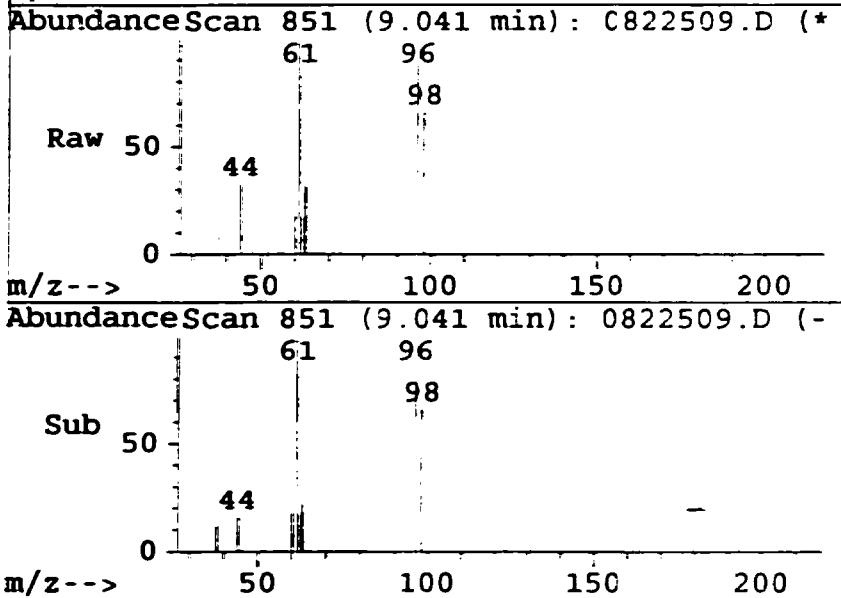
		Ion Ratio	Lower	Upper
63	100			
65	32.9	26.0	38.9	
83	8.2	12.1	18.1	#
0	0.0	0.0	0.0	

Abundance Ion 63.05 (62.  
Ion 65.05 (64.  
Ion 82.95 (82.

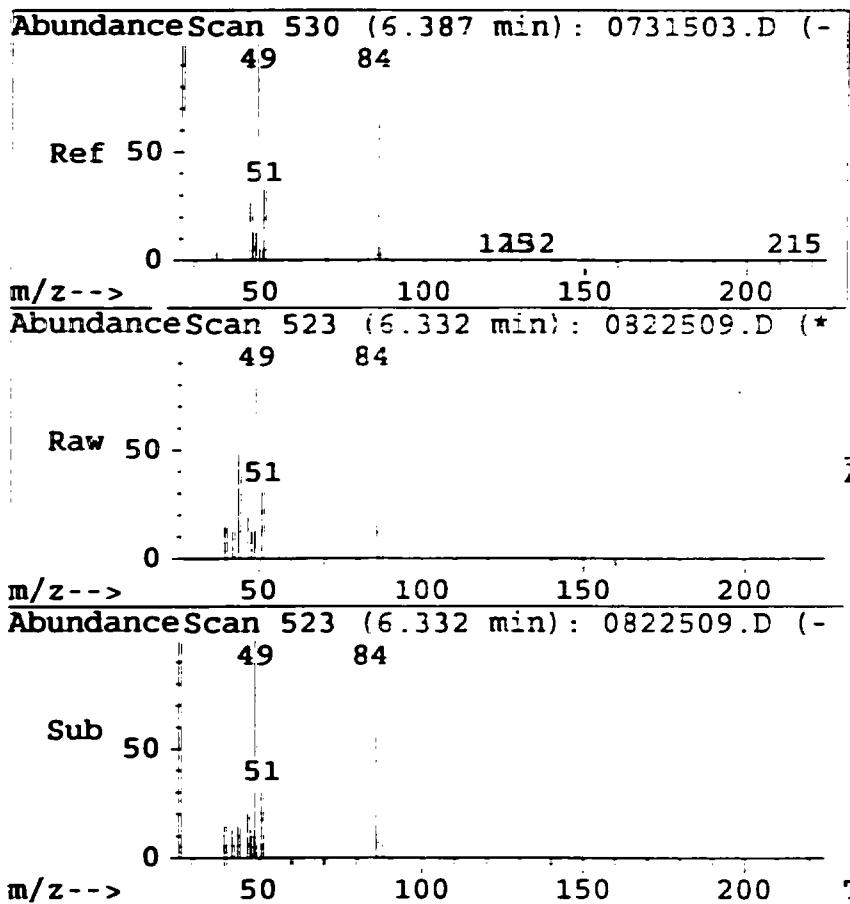
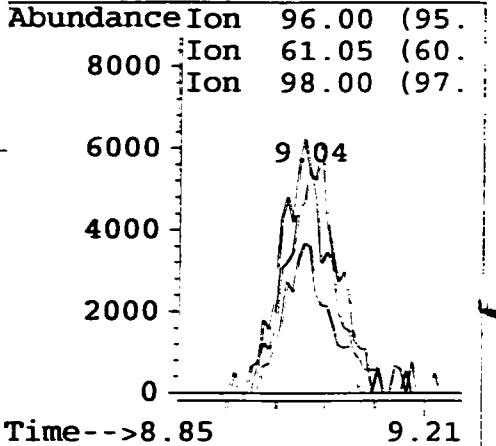




#28  
**cis-1,2-Dichloroethene**  
Concen: 0.23 µg/L  
RT: 9.04 min Scan# 851  
Delta R.T. -0.05 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm

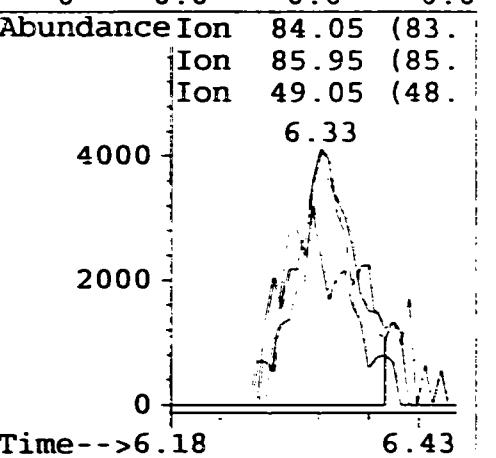


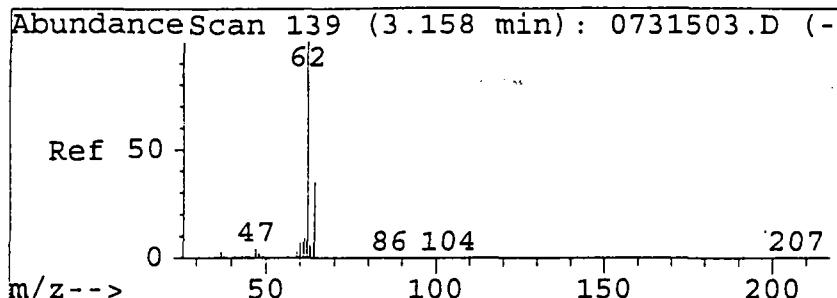
Tgt	Ion:	96	Resp:	26256
Ion	Ratio	Lower	Upper	
96	100			
61	127.9	125.1	187.6	
98	61.5	53.5	80.2	
0	0.0	0.0	0.0	



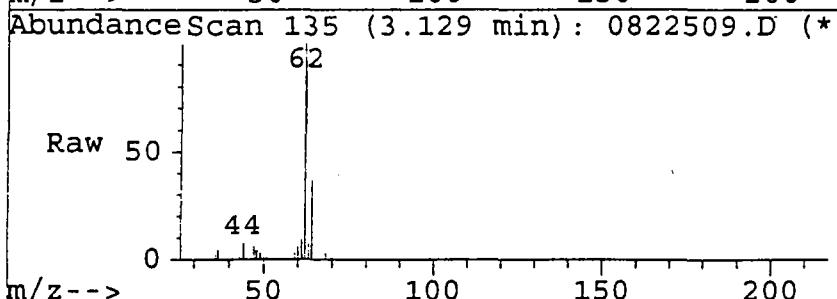
#33  
**Methylene chloride**  
Concen: 0.19 µg/L  
RT: 6.33 min Scan# 523  
Delta R.T. -0.08 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm

Tgt	Ion:	84.05	Resp:	18604
Ion	Ratio	Lower	Upper	
84	100			
86	65.6	53.5	80.2	
49	108.5	91.4	137.1	
0	0.0	0.0	0.0	

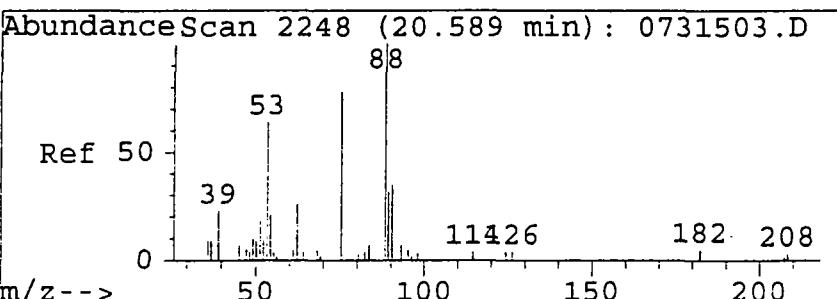
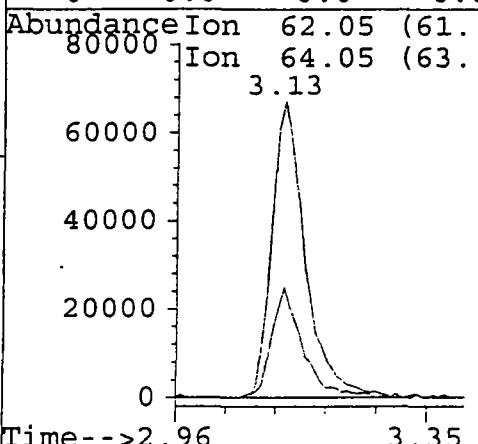
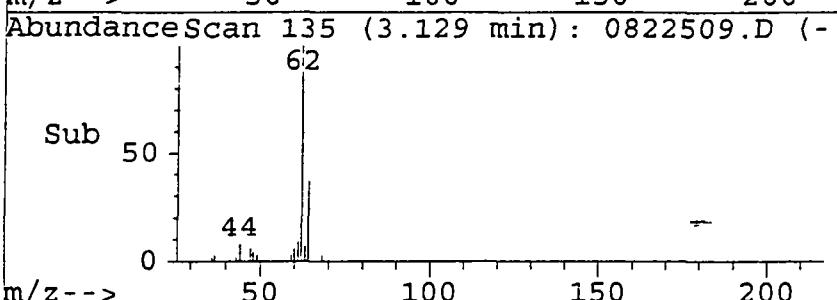




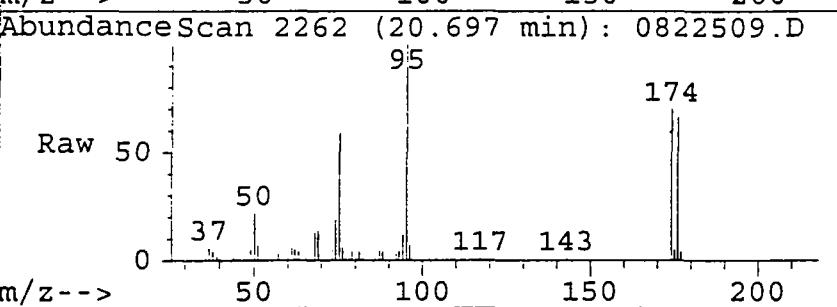
#36  
Vinyl chloride  
Concen: 3.13 µg/L  
RT: 3.13 min Scan# 135  
Delta R.T. -0.05 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm



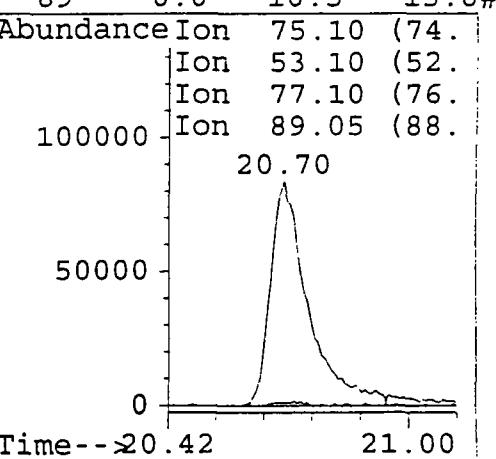
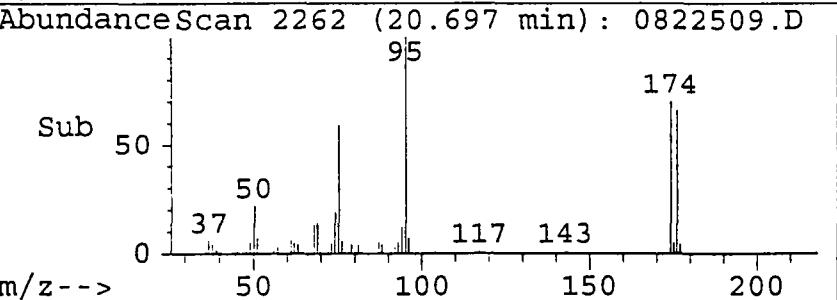
Tgt Ion: 62.05 Resp: 238095  
Ion Ratio Lower Upper  
62 100  
64 34.9 29.0 43.5  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0



#44  
cis-1,4-Dichloro-2-butene  
Concen: 35.36 µg/L  
RT: 20.70 min Scan# 2262  
Delta R.T. 0.08 min  
Lab File: 0822509.D  
Acq: 22 Aug 97 2:50 pm



Tgt Ion: 75.1 Resp: 530451  
Ion Ratio Lower Upper  
75 100  
53 0.0 17.9 26.8#  
77 0.7 12.5 18.8#  
89 0.0 10.5 15.8#



1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1TB1W

Lab Name: IEA-NC	Method: SOW 10/92	
Lab Code: IEA	Case No.: 1364-226	SDG No.: 08367
Matrix: (soil/water) WATER	Lab Sample ID: 970836703	
Sample wt/vol: 25 (g/mL) ml	Lab File ID: 0822510.D	
Level: (low/med) LOW	Date Received: 08/16/97	
* Moisture: not dec.	Date Analyzed: 08/22/97	
GC Column: DB-624 ID: .53 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l Q
67-64-1	Acetone	3	J
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.3	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1TB1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836703

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822510.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-88-3	Toluene		1	U
71-55-6	1,1,1-Trichloroethane		1	U
79-00-5	1,1,2-Trichloroethane		1	U
79-01-6	Trichloroethene		1	U
75-01-4	Vinyl Chloride		1	U
1330-20-7	Xylene (Total)		5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

ECC1TB1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code : IEA

Case No.: 1364-226

SDG No.: 08367

**Matrix: (soil/water)    WATER**

Lab Sample ID: 970836703

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822510.D

**Level:** (low/med) **LOW**

Date Received: 08/16/97

**Moisture:** not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

**Soil Extract Volume:** (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

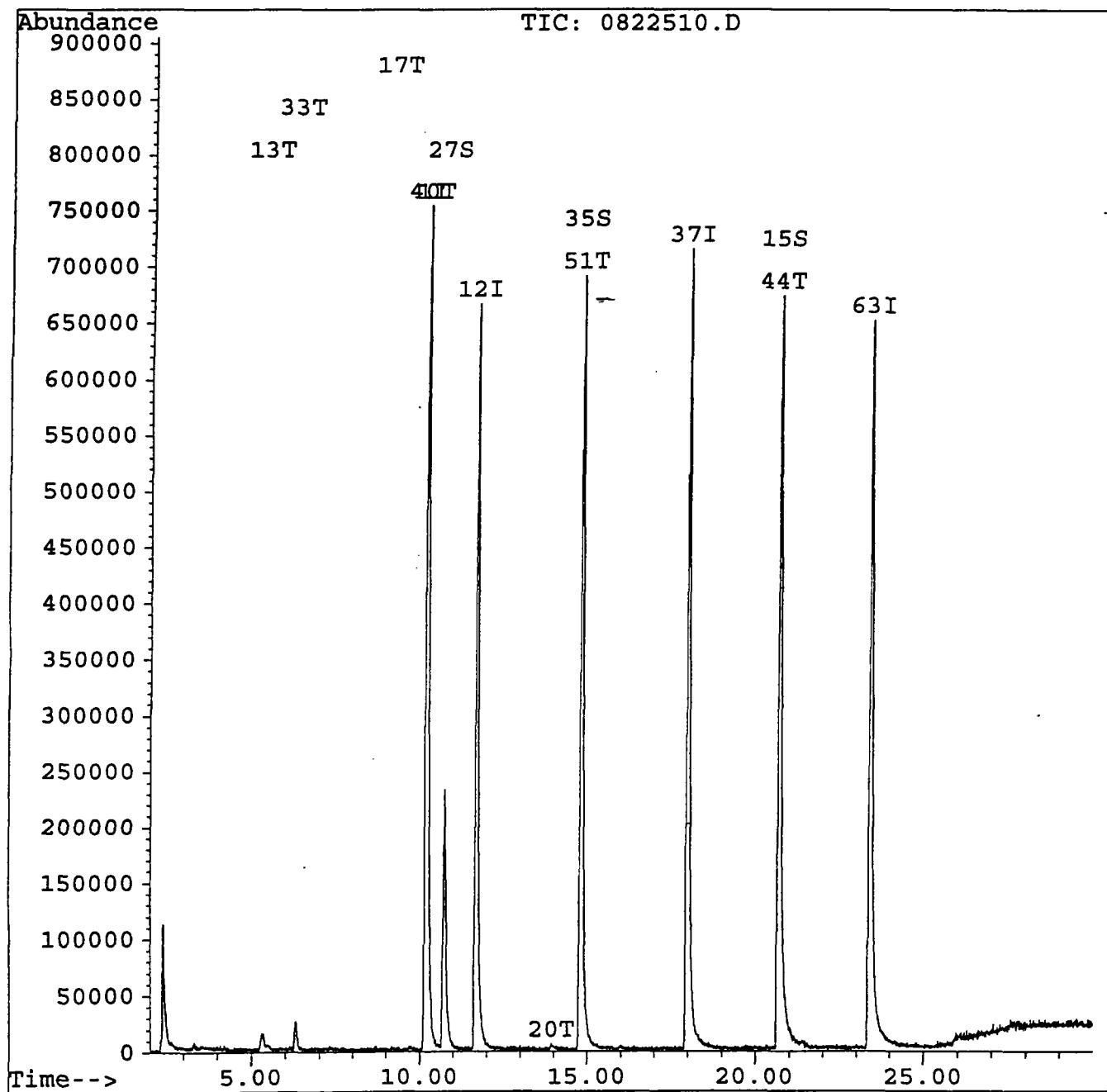
**CONCENTRATION UNITS:**  
( $\mu\text{g}/\text{L}$  or  $\mu\text{g}/\text{Kg}$ )     $\mu\text{g}/\text{l}$

Quantitation Report

Data File : J:\HPCHEM\1\DATA\9708225.B\0822510.D  
Acq On : 22 Aug 97 3:27 pm  
Sample : 970836703 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Sep 3 9:01 1997

Vial: 7  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : J:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : J:\HPCHEM\1\DATA\9708225.B\0822510.D  
 Acq On : 22 Aug 97 3:27 pm  
 Sample : 970836703 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Sep 3 9:01 1997

Vial: 7  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

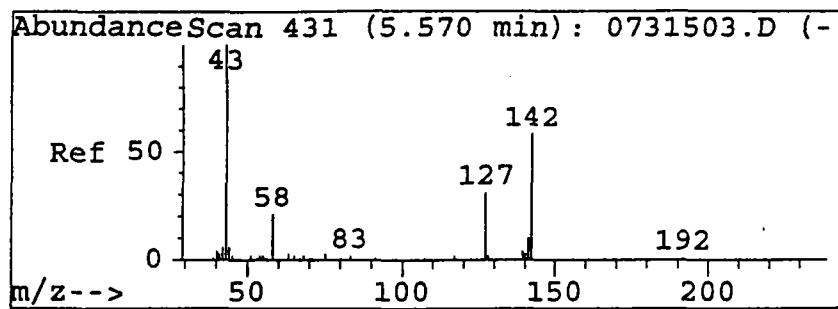
Method : J:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.19	168	1465640	5.00	µg/L	-0.07
12) 1,4-Difluorobenzene	11.70	114	1593786	5.00	µg/L	-0.07
37) Chlorobenzene-d5	17.98	117	1315854	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.41	152	642684	5.00	µg/L	0.04
<b>System Monitoring Compounds</b>						% Recovery
15) 4-Bromofluorobenzene	20.71	95	947282	4.86	µg/L	97.17
27) 1,2-Dichloroethane-d4	10.73	102	105347	4.61	µg/L	92.29
35) Toluene-d8	14.82	98	1497008	4.81	µg/L	91.20
<b>Target Compounds</b>						Qvalue
13) Acetone	5.46	43	17910	3.33	µg/L	m - 56
17) 2-Butanone	9.19	43	3561	0.41	µg/L	# 48
20) 2-Chloroethyl vinyl ether	13.94	63	14340	0.47	µg/L	# 48
33) Methylene chloride	6.33	84	28626	0.30	µg/L	- 93
40) Carbon tetrachloride	10.19	117	167429	0.72	µg/L	# 5
44) cis-1,4-Dichloro-2-butene	20.70	75	529687	36.02	µg/L	# 60
51) 4-Methyl-2-pentanone	14.81	43	11093	9.36	µg/L	# 1

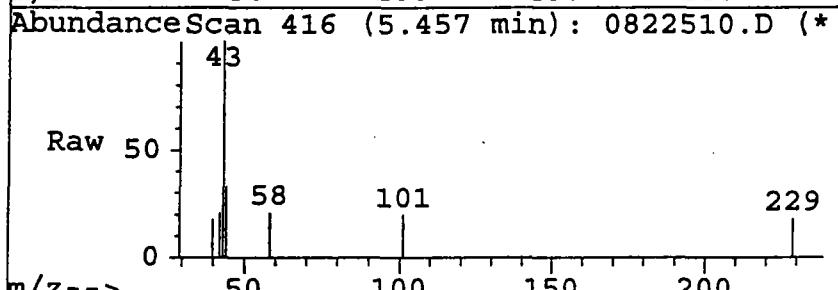
N abn

(#) = qualifier out of range (m) = manual integration  
 0822510.D M691.M Wed Sep 03 09:02:42 1997 VOL1

Page 1

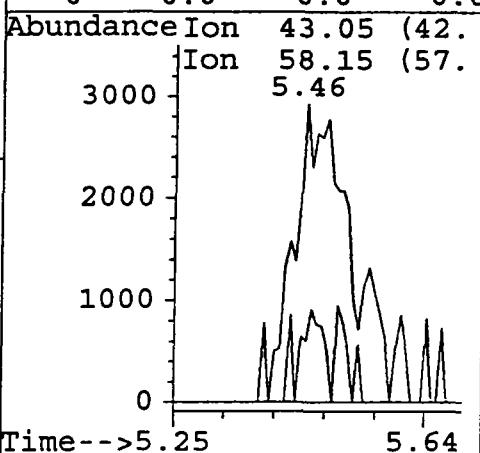
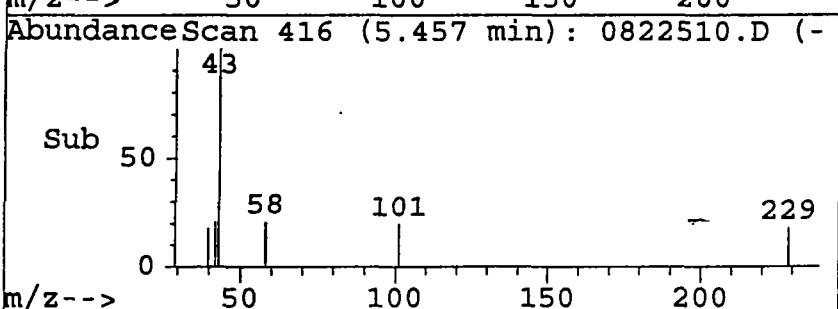


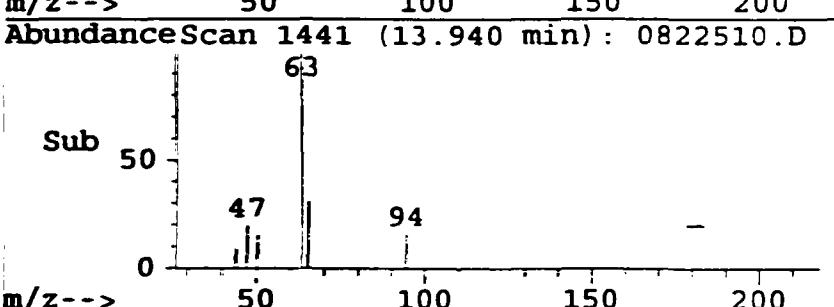
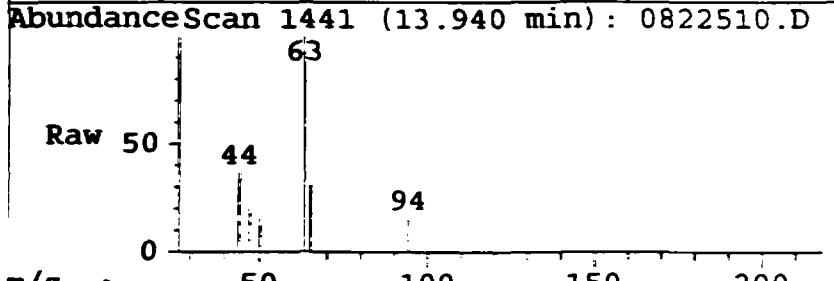
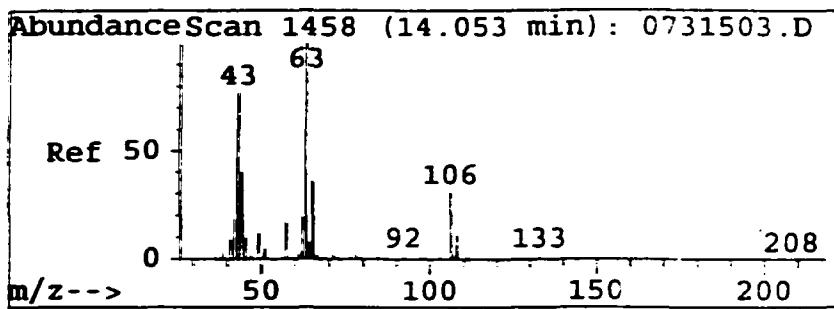
#13  
Acetone  
Concen: 3.33  $\mu\text{g/L}$   
RT: 5.46 min Scan# 416  
Delta R.T. -0.15 min  
Lab File: 0822510.D  
Acq: 22 Aug 97 3:27 pm



Tgt Ion: 43.05 Resp: 17910

Ion	Ratio	Lower	Upper
43	100		
58	20.6	18.6	27.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

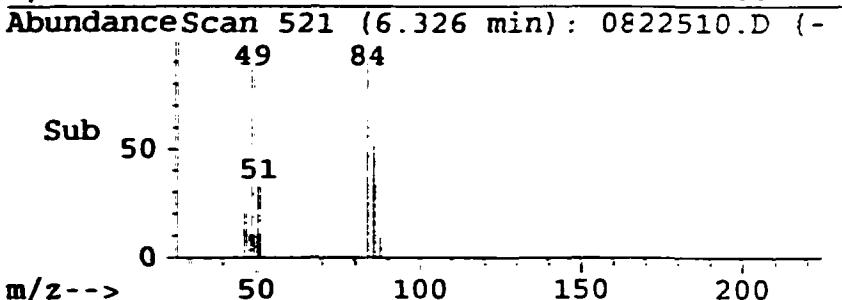
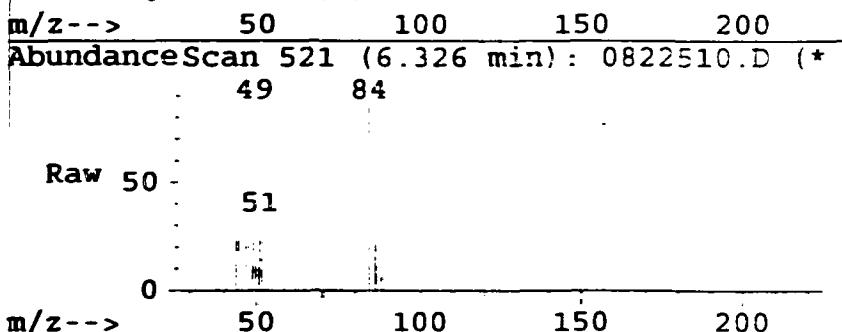
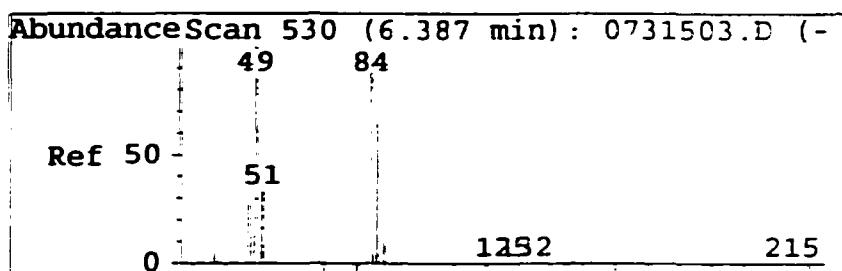
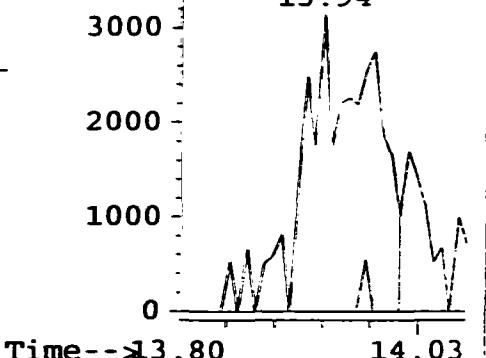




#20  
2-Chloroethyl vinyl ether  
Concen: 0.47 µg/L  
RT: 13.94 min Scan# 1441  
Delta R.T. -0.09 min  
Lab File: 0822510.D  
Acq: 22 Aug 97 3:27 pm

Tgt Ion: 63.05 Resp: 14340  
Ion Ratio Lower Upper  
63 100  
106 0.0 21.7 32.6#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

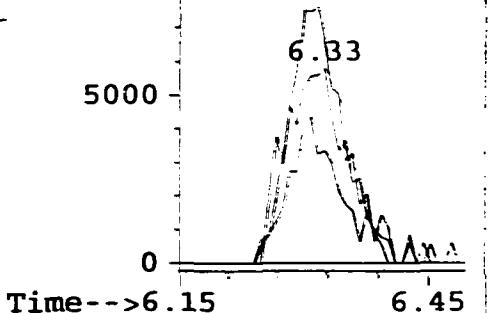
Abundance Ion 63.05 (62.  
Ion 106.10 (105  
13.94

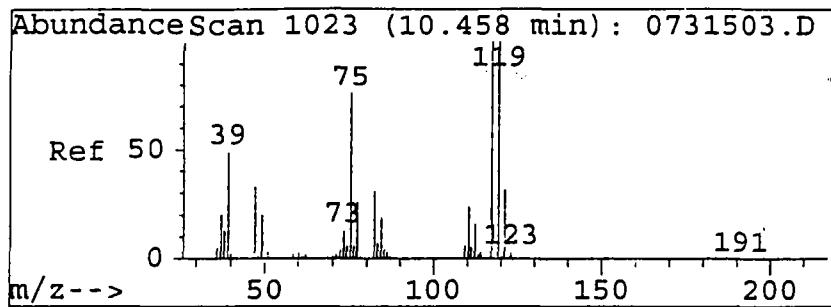


#33  
Methylene chloride  
Concen: 0.30 µg/L  
RT: 6.33 min Scan# 521  
Delta R.T. -0.09 min  
Lab File: 0822510.D  
Acq: 22 Aug 97 3:27 pm

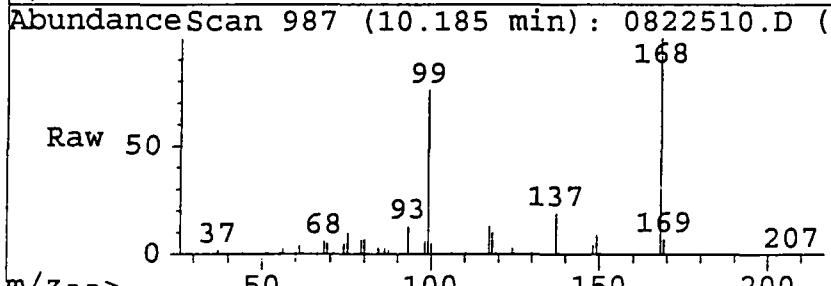
Tgt Ion: 84.05 Resp: 28626  
Ion Ratio Lower Upper  
84 100  
86 63.4 53.5 80.2  
49 123.9 91.4 137.1  
0 0.0 0.0 0.0

Abundance Ion 84.05 (83.  
Ion 85.95 (85.  
Ion 49.05 (48.

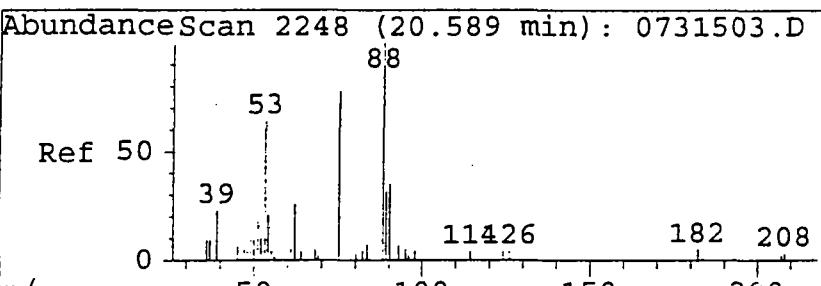
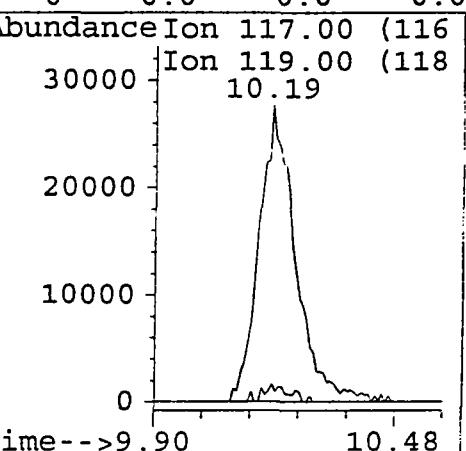
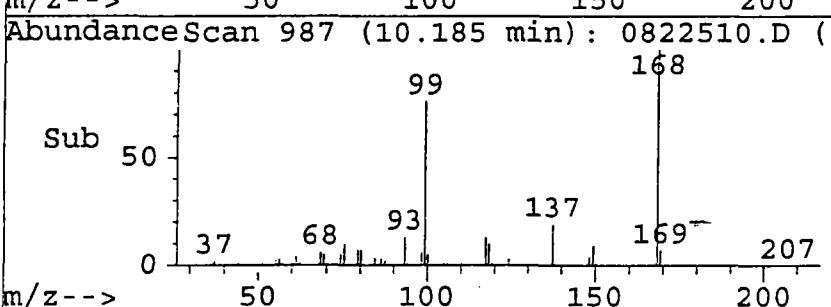




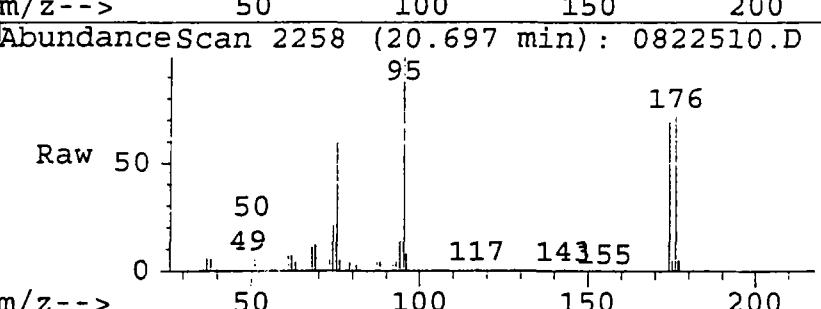
#40  
Carbon tetrachloride  
Concen: 0.72 µg/L  
RT: 10.19 min Scan# 987  
Delta R.T. -0.29 min  
Lab File: 0822510.D  
Acq: 22 Aug 97 3:27 pm



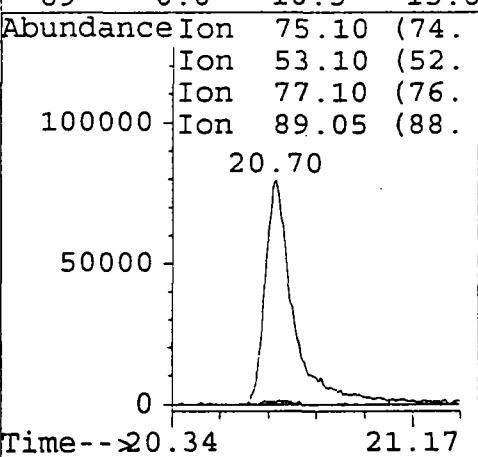
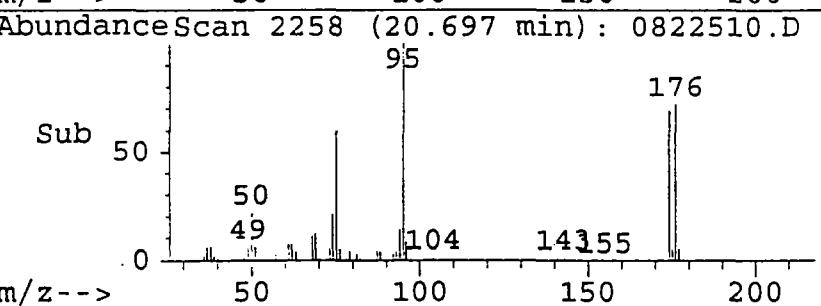
Tgt Ion: 117 Resp: 167429  
Ion Ratio Lower Upper  
117 100  
119 3.1 77.1 115.6#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0



#44  
cis-1,4-Dichloro-2-butene  
Concen: 36.02 µg/L  
RT: 20.70 min Scan# 2258  
Delta R.T. 0.08 min  
Lab File: 0822510.D  
Acq: 22 Aug 97 3:27 pm



Tgt Ion: 75.1 Resp: 529687  
Ion Ratio Lower Upper  
75 100  
53 0.0 17.9 26.8#  
77 0.6 12.5 18.8#  
89 0.0 10.5 15.8#



1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T5W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l Q
67-64-1	Acetone	14	
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	0.2	J
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T5W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

108-88-3	Toluene	0.2	J
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	0.2	J

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

Lab Name: TEA-NC

Method: SOW 10/92

ECC1T5W

Lab Code: TEA

Case No.: 1364-226

SDG No. : 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836704

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822511.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

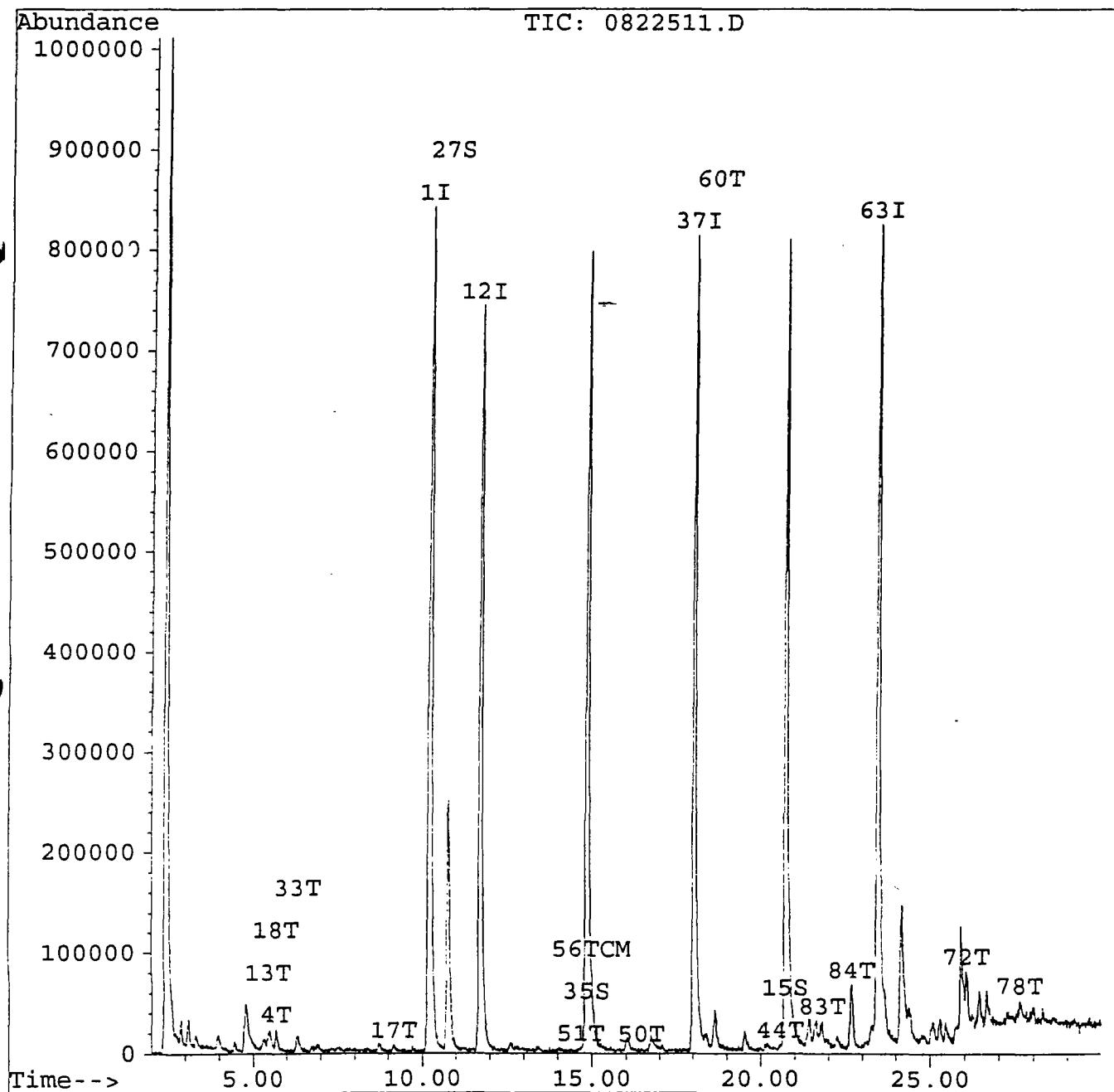
**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822511.D  
Acq On : 22 Aug 97 4:04 pm  
Sample : 970836704 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 22 16:35 1997

Vial: 8  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation Report

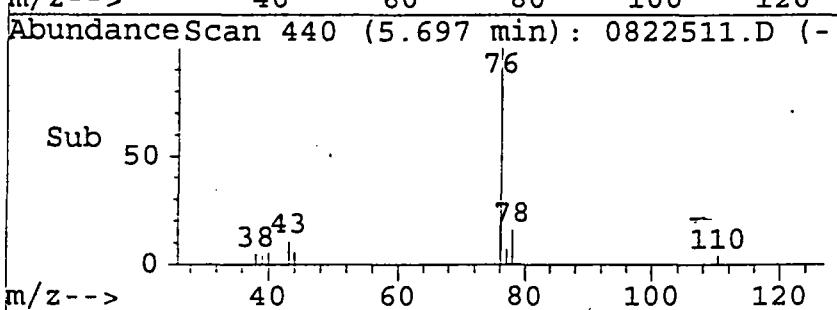
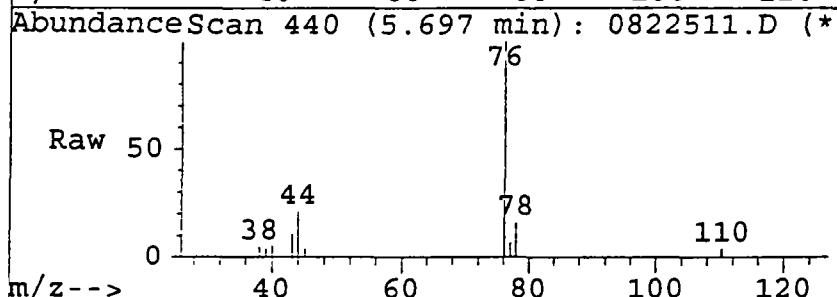
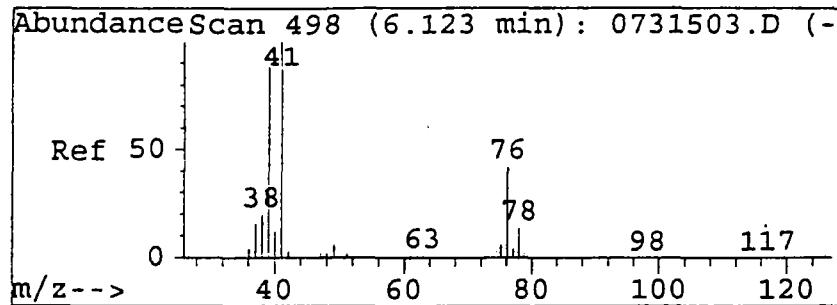
Data File : C:\HPCHEM\1\DATA\9708225.B\0822511.D  
 Acq On : 22 Aug 97 4:04 pm  
 Sample : 970836704 IEA MSD5  
 Misc : WATER LOW IX  
 Quant Time: Aug 22 16:35 1997

Vial: 8  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

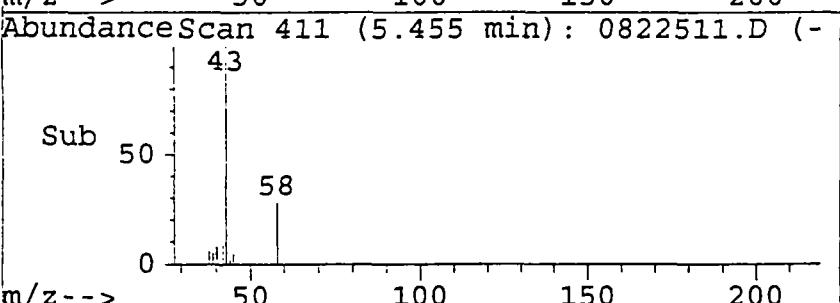
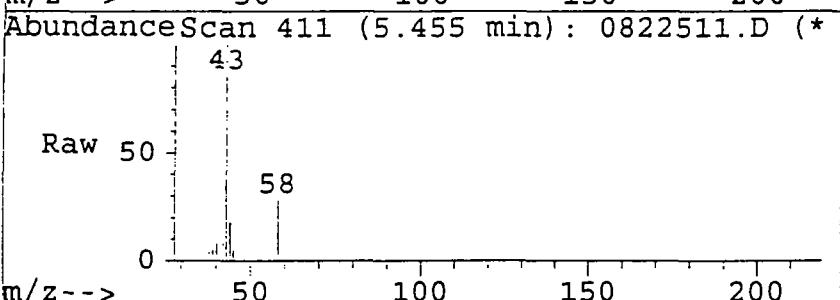
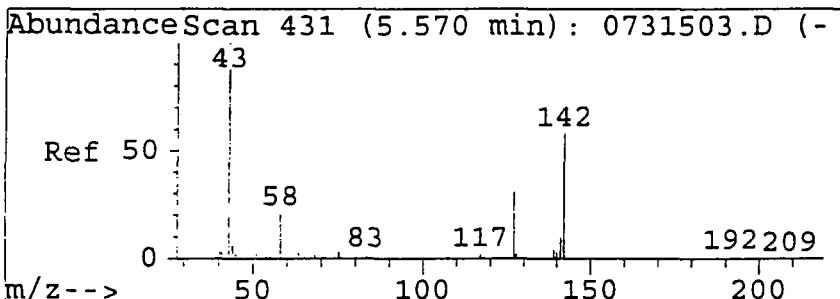
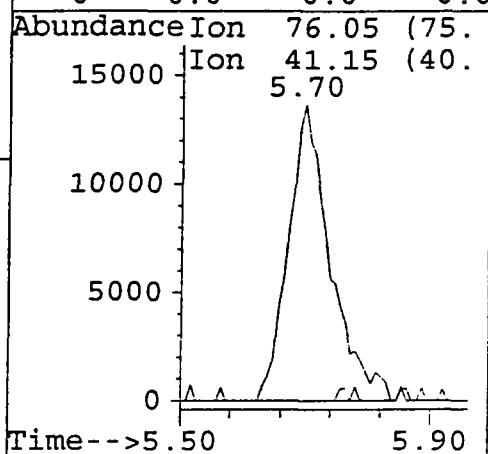
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.19	168	1660750	5.00	µg/L	-0.07
12) 1,4-Difluorobenzene	11.71	114	1782081	5.00	µg/L	-0.05
37) Chlorobenzene-d5	18.01	117	1466520	5.00	µg/L	0.02
63) 1,4-Dichlorobenzene-d4	23.44	152	735037	5.00	µg/L	0.07
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.72	95	1061875	4.87	µg/L	97.41%
27) 1,2-Dichloroethane-d4	10.75	102	111695	4.38	µg/L	87.51%
35) Toluene-d8	14.84	98	1726237	4.96	µg/L	99.0%
<b>Target Compounds</b>						Qvalue
4) Allyl chloride	5.70	76	64586	1.30	µg/L	# 1
13) Acetone	5.45	43	83708	13.90	µg/L	97
17) 2-Butanone	9.15	43	20410	2.12	µg/L	# 69
18) Carbon disulfide	5.70	76	64586	0.21	µg/L	97
33) Methylene chloride	6.32	84	15801	0.15	µg/L	95
44) cis-1,4-Dichloro-2-butene	20.59	75	2845	0.17	µg/L	# 56
50) 2-Hexanone	16.44	43	3577	0.20	µg/L	# 35
51) 4-Methyl-2-pentanone	14.68	43	10772	0.32	µg/L	# 60
56) Toluene	14.99	91	76011	0.19	µg/L	98
60) m,p-Xylene	18.64	106	37403	0.20	µg/L	86
72) 1,2-Dibromo-3-chloropropan	26.03	75	1617	0.15	µg/L	# 11
78) Naphthalene	27.60	128	32928	0.54	µg/L	100
83) 1,3,5-Trimethylbenzene	21.80	105	41461	0.11	µg/L	100
84) 1,2,4-Trimethylbenzene	22.66	105	140806	0.38	µg/L	94

Attn:



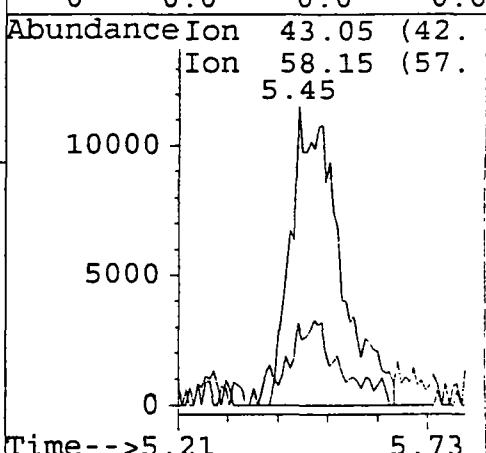
#4  
**Allyl chloride**  
Concen: 1.30  $\mu\text{g/L}$   
RT: 5.70 min Scan# 440  
Delta R.T. -0.46 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm

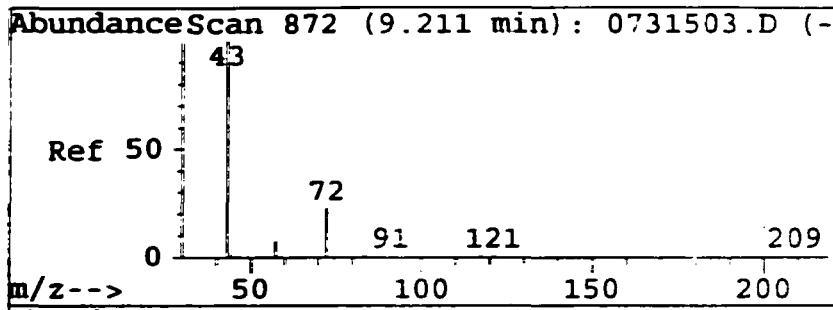
Tgt Ion: 76.05 Resp: 64586  
Ion Ratio Lower Upper  
76 100  
41 0.0 189.8 284.7#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0



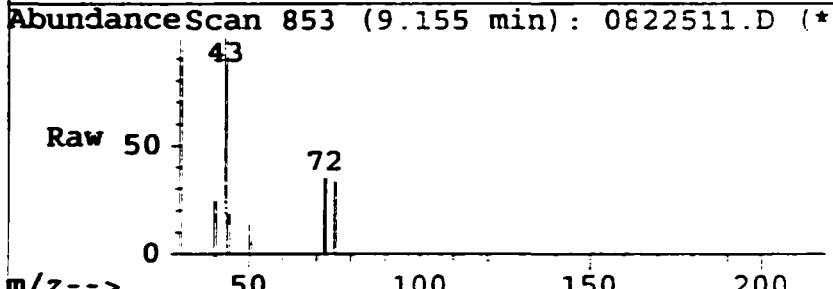
#13  
**Acetone**  
Concen: 13.90  $\mu\text{g/L}$   
RT: 5.45 min Scan# 411  
Delta R.T. -0.15 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm

Tgt Ion: 43.05 Resp: 83708  
Ion Ratio Lower Upper  
43 100  
58 24.9 18.6 27.9  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

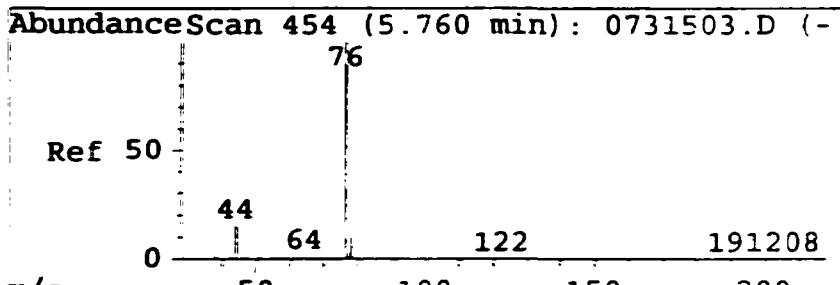
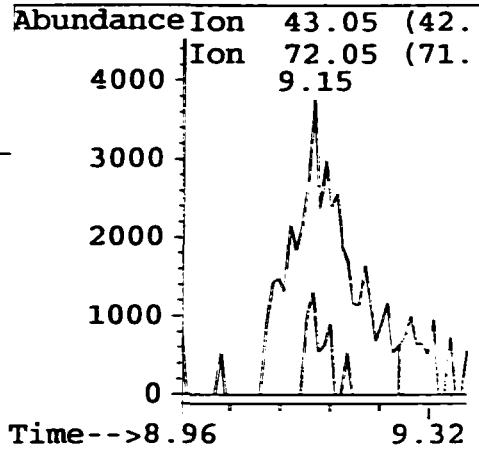
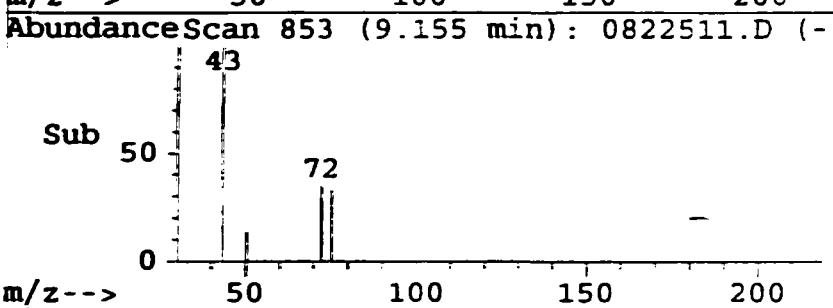




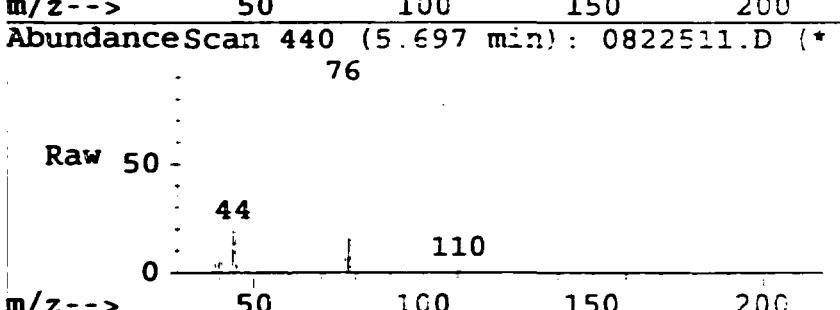
#17  
2-Butanone  
Concen: 2.12 µg/L  
RT: 9.15 min Scan# 853  
Delta R.T. -0.06 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm



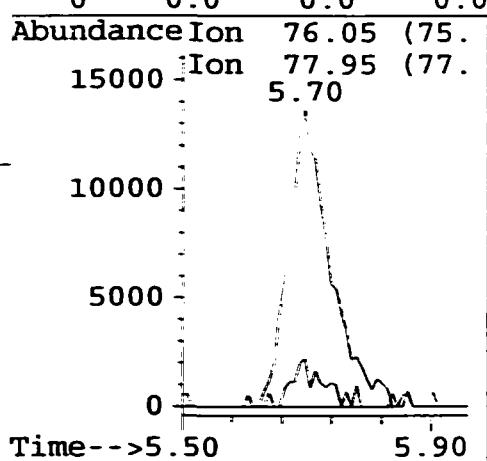
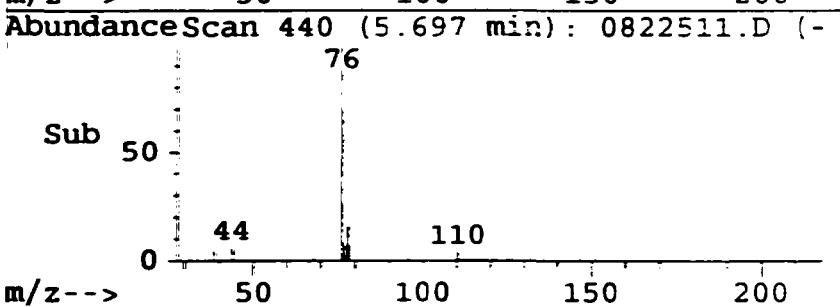
Tgt Ion: 43.05 Resp: 20410  
Ion Ratio Lower Upper  
43 100  
72 10.9 21.7 32.6#  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

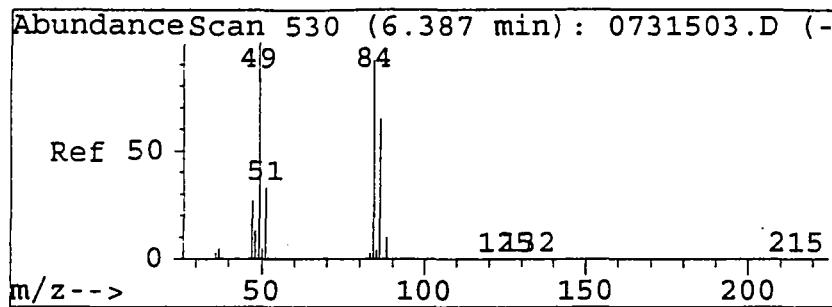


#18  
Carbon disulfide  
Concen: 0.21 µg/L  
RT: 5.70 min Scan# 440  
Delta R.T. -0.09 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm

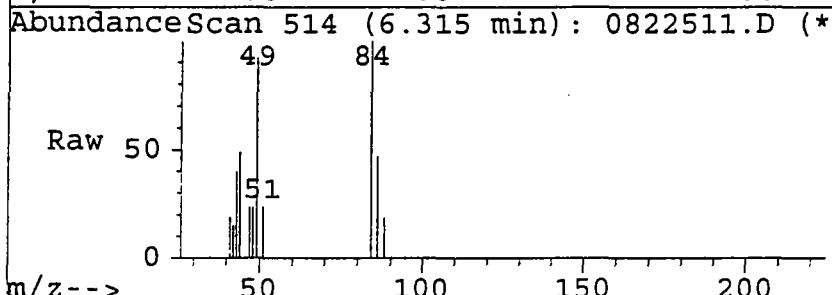


Tgt Ion: 76.05 Resp: 64586  
Ion Ratio Lower Upper  
76 100  
78 10.9 8.0 11.9  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

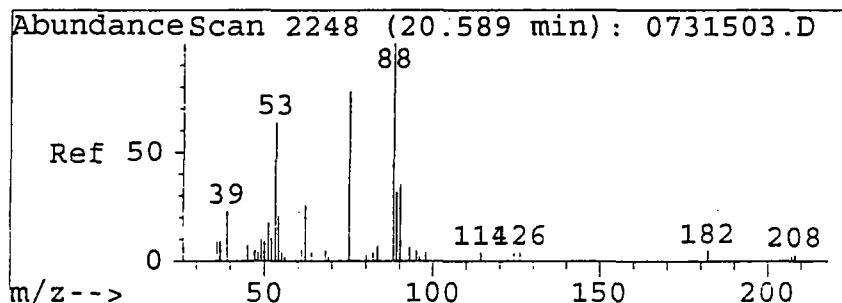
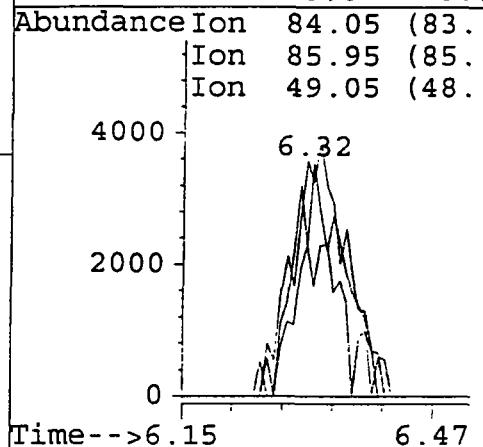
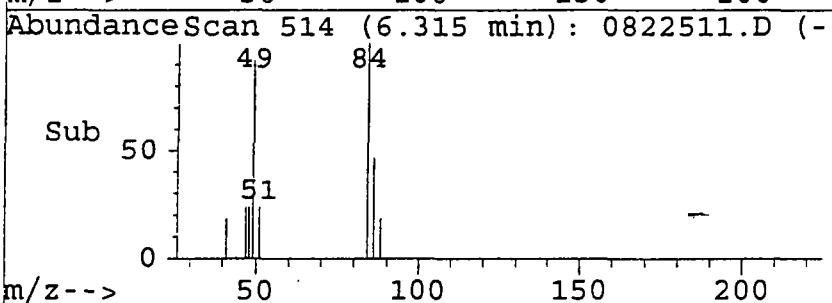




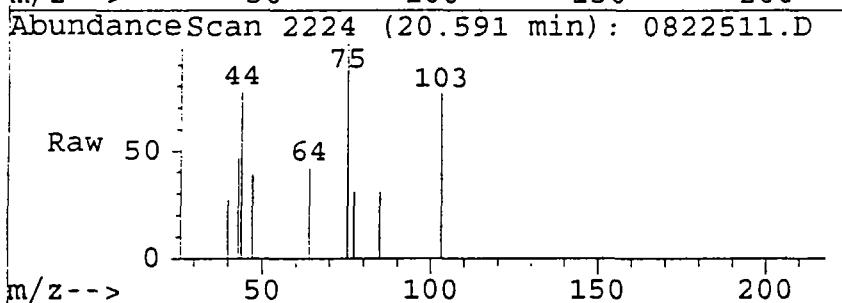
#33  
Methylene chloride  
Concen: 0.15 µg/L  
RT: 6.32 min Scan# 514  
Delta R.T. -0.10 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm



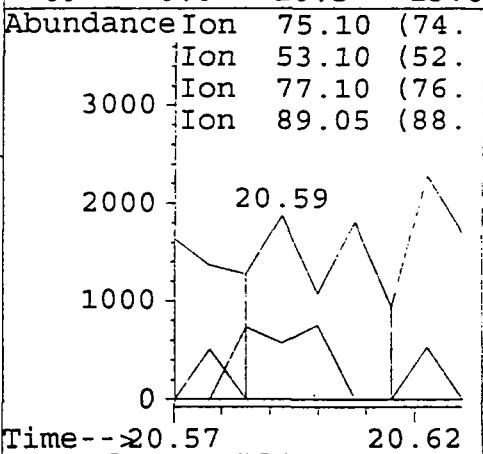
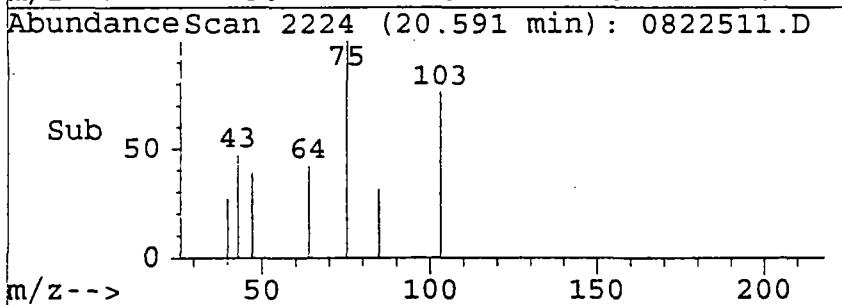
Tgt Ion:	84.05	Resp:	15801
Ion	Ratio	Lower	Upper
84	100		
86	57.5	53.5	80.2
49	113.7	91.4	137.1
0	0.0	0.0	0.0

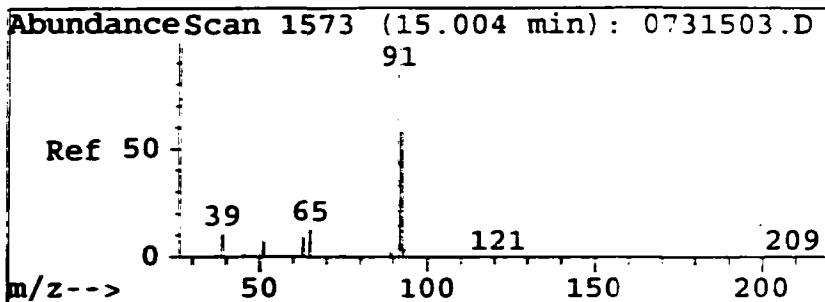


#44  
cis-1,4-Dichloro-2-butene  
Concen: 0.17 µg/L  
RT: 20.59 min Scan# 2224  
Delta R.T. -0.03 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm

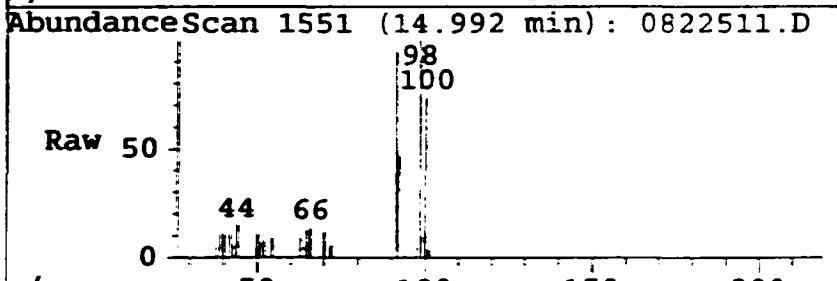


Tgt Ion:	75.1	Resp:	2845
Ion	Ratio	Lower	Upper
75	100		
53	0.0	17.9	26.8#
77	36.2	12.5	18.8#
89	0.0	10.5	15.8#



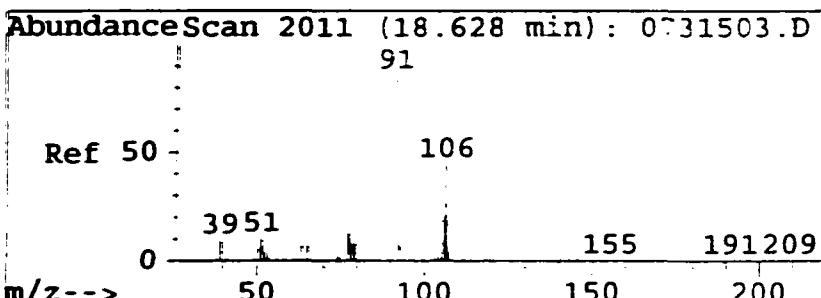
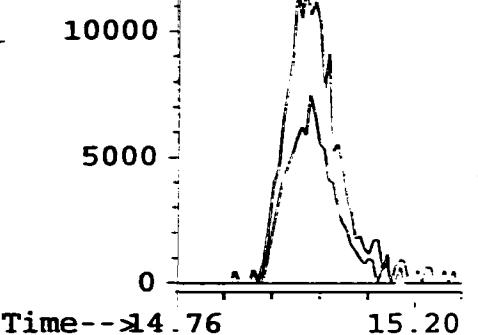
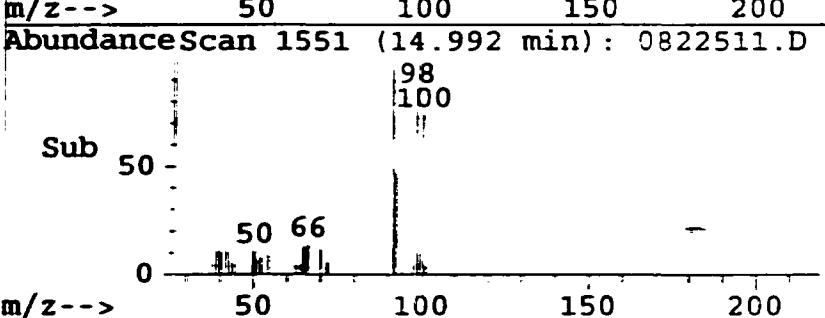


#56  
Toluene  
Concen: 0.19 µg/L  
RT: 14.99 min Scan# 1551  
Delta R.T. -0.01 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm

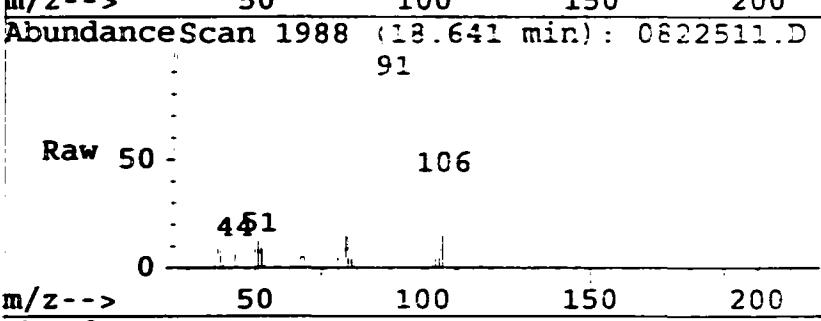


Tgt Ion:	Ion Ratio	Lower	Upper
91.2	100		
92	56.6	46.7	70.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

Abundance Ion 91.20 (90.  
Ion 92.10 (91.  
14.99

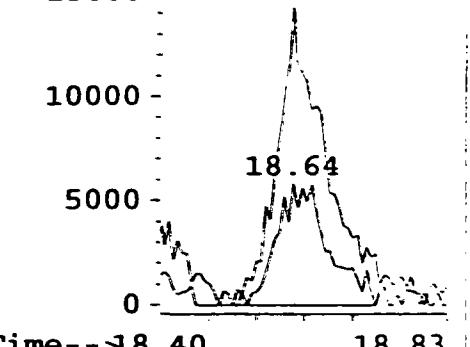
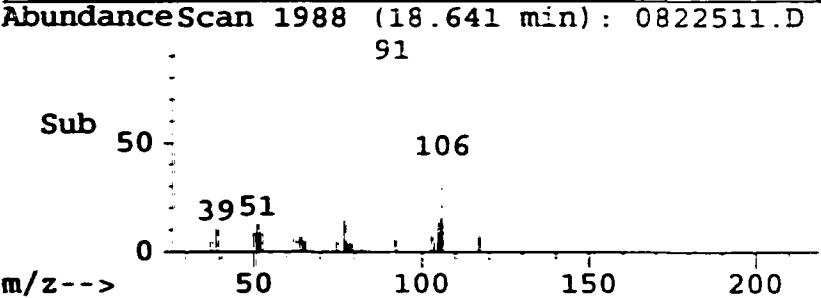


#60  
m,p-Xylene  
Concen: 0.20 µg/L  
RT: 18.64 min Scan# 1988  
Delta R.T. 0.04 min  
Lab File: 0822511.D  
Acq: 22 Aug 97 4:04 pm



Tgt Ion: 106.2 Resp: 37403  
Ion Ratio Lower Upper  
106 100  
91 244.5 178.0 266.9  
0 0.0 0.0 0.0  
0 0.0 0.0 0.0

Abundance Ion 106.20 (105.  
Ion 91.00 (90.



6LCA  
LOW CONC. WATER VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD5      Calibration Date(s): 07/31/97 07/31/97  
Heated Purge: (Y/N) N      Calibration Times: 08:03 11:47

GC Column: DB-624      ID: .53 (mm)

Min RRF for SPCC(#) = .300,.100      Max %RSD for CCC(\*) = 30.0%  
Min RRF for Bromoform = 0.250

LAB FILE ID: RRF05 = 0731503.D	RRF01 = 0731501.D RRF010= 0731504.D	RRF02 = 0731502.D RRF025= 0731505.D
-----------------------------------	--	--

COMPOUND	RRF01	RRF02	RRF05	RRF010	RRF025	RRF	% RSD
Acetone	0.016	0.015	0.018	0.015	0.013	0.015	11.3
Benzene	* 0.904	0.909	0.912	0.846	0.880	0.893	2.9 *
Bromochloromethane	* 0.185	0.172	0.173	0.160	0.155	0.167	7.2 *
Bromodichloromethane	* 0.602	0.559	0.570	0.527	0.573	0.567	4.3 *
Bromoform	* 0.286	0.269	0.271	0.262	0.318	0.285	7.7 *
Bromomethane	* 0.229	0.240	0.233	0.209	0.214	0.225	5.2 *
2-Butanone	0.024	0.025	0.026	0.027	0.025	0.025	4.5
Carbon Disulfide	0.716	0.716	0.709	0.655	0.668	0.692	3.8
Carbon Tetrachloride	* 0.824	0.823	0.788	0.712	0.745	0.772	6.0 *
Chlorobenzene	* 0.953	0.969	0.954	0.908	0.931	0.941	2.3 *
Chloroethane	0.124	0.126	0.106	0.091	0.090	0.104	16.3
Chloroform	* 0.737	0.717	0.716	0.649	0.652	0.690	5.5 *
Chloromethane	0.130	0.132	0.126	0.114	0.110	0.120	8.4
Dibromochloromethane	* 0.360	0.333	0.333	0.323	0.358	0.345	4.9 *
1,2-Dibromo-3-Chloropropane	0.064	0.073	0.067	0.061	0.075	0.068	7.7
1,2-Dibromoethane	* 0.362	0.366	0.372	0.340	0.352	0.356	3.5 *
1,2-Dichlorobenzene	* 1.263	1.282	1.267	1.210	1.276	1.251	2.6 *
1,3-Dichlorobenzene	* 1.434	1.484	1.469	1.437	1.534	1.475	2.6 *
1,4-Dichlorobenzene	* 1.582	1.563	1.570	1.486	1.581	1.552	2.4 *
1,1-Dichloroethane	* 0.483	0.523	0.487	0.466	0.459	0.482	4.7 *
1,2-Dichloroethane	* 0.342	0.338	0.342	0.309	0.306	0.323	5.9 *
1,1-Dichloroethene	* 0.266	0.266	0.268	0.240	0.243	0.255	5.1 *
Cis-1,2-Dichloroethene	0.325	0.307	0.303	0.281	0.277	0.296	6.3
Trans-1,2-Dichloroethene	0.288	0.282	0.283	0.258	0.261	0.273	4.7
1,2-Dichloropropane	0.362	0.357	0.354	0.333	0.343	0.349	3.0
Cis-1,3-Dichloropropene	* 0.512	0.515	0.522	0.496	0.504	0.511	1.8 *
Trans-1,3-Dichloropropene	* 0.383	0.403	0.402	0.383	0.387	0.390	2.4 *
Ethylbenzene	* 1.437	1.496	1.467	1.369	1.438	1.443	2.9 *
2-Hexanone	0.051	0.058	0.065	0.062	0.064	0.061	8.5
Methylene Chloride	0.248	0.231	0.230	0.223	0.212	0.227	5.4
4-Methyl-2-Pentanone	0.083	0.097	0.107	0.102	0.104	0.099	8.5
Styrene	* 0.852	0.857	0.868	0.822	0.845	0.848	1.8 *
1,1,2,2-Tetrachloroethane	* 0.272	0.289	0.302	0.281	0.291	0.286	3.7 *
Tetrachloroethene	* 0.509	0.508	0.494	0.456	0.471	0.485	4.5 *
Toluene	* 1.123	1.142	1.162	1.074	1.141	1.134	2.9 *
1,1,1-Trichloroethane	* 0.883	0.865	0.844	0.760	0.784	0.820	6.2 *
1,1,2-Trichloroethane	* 0.273	0.250	0.254	0.234	0.242	0.248	5.8 *
Trichloroethene	* 0.561	0.541	0.541	0.492	0.510	0.527	4.8 *

\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

6LCA  
LOW CONC. WATER VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD5      Calibration Date(s): 07/31/97 07/31/97  
 Heated Purge: (Y/N) N      Calibration Times: 08:03 11:47

GC Column: DB-624      ID: .53 (mm)

Min RRF for SPCC(#) = .300,.100      Max %RSD for CCC(\*) = 30.0%  
 Min RRF for Bromoform = 0.250

<b>LAB FILE ID:</b>	RRF01 = 0731501.D	RRF02 = 0731502.D
RRF05 = 0731503.D	RRF010= 0731504.D	RRF025= 0731505.D

COMPOUND	RRF01	RRF02	RRF05	RRF010	RRF025	RRF	% RSD
Vinyl Chloride	* 0.174	0.187	0.186	0.171	0.174	0.178	3.8 *
Xylene (Total)	* 0.537	0.541	0.533	0.502	0.515	0.524	3.0 *
4-Bromofluorobenzene	* 0.648	0.614	0.606	0.581	0.553	0.595	5.9 *

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.

## Response Factor Report MSD5

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:03:48 1997  
 Response via : Initial Calibration

## Calibration Files

1	=0731501.D	2	=0731502.D	5	=0731503.D
10	=0731504.D	25	=0731506.D	20	=0731505.D

B6/91

L+30

	Compound	1	2	5	10	25	20	Avg	%RS
1)	I Pentafluorobenzene			----- ISTD -----					
2)	T Acetonitrile	0.283	0.292	0.280	0.264	0.270	0.276	0.278	3.6
3)	T Acrylonitrile	0.027	0.024	0.020	0.019	0.017	0.018	0.021	18.1
4)	T Allyl chloride	0.123	0.119	0.128	0.116	0.119	0.121	0.121	3.4
5)	T Dichlorodifluoromethane	0.518	0.522	0.499	0.457	0.467	0.471	0.489	5.6
6)	T 2,2-Dichloropropane	0.571	0.610	0.588	0.545	0.554	0.574	0.574	4.0
7)	T Iodomethane	0.772	0.822	0.800	0.733	0.783	0.772	0.780	3.8
8)	T Methacrylonitrile	0.039	0.043	0.040	0.036	0.035	0.039	0.039	7.2
9)	T Methyl-tert-Butyl ether	0.381	0.382	0.392	0.353	0.347	0.363	0.370	4.9
10)	T Trichlorofluoromethane	0.678	0.718	0.699	0.615	0.456	0.483	0.608	18.6
11)	T Vinyl acetate	0.213	0.239	0.241	0.226	0.234	0.234	0.231	4.4
12)	I 1,4-Difluorobenzene			----- ISTD -----					
13)	T Acetone	0.016	0.015	0.018	0.015	0.014	0.013	0.015	11.2
14)	T Bromochloromethane	0.185	0.172	0.173	0.160	0.156	0.155	0.167	7.1
15)	S 4-Bromofluorobenzene	0.648	0.614	0.606	0.581	0.567	0.553	0.595	5.8
16)	T Bromomethane	0.229	0.240	0.233	0.209	0.223	0.214	0.225	5.2
17)	T 2-Butanone	0.024	0.025	0.026	0.027	0.024	0.025	0.025	4.4
18)	T Carbon disulfide	0.716	0.716	0.709	0.655	0.686	0.668	0.692	3.8
19)	T Chloroethane	0.124	0.126	0.106	0.091	0.089	0.090	0.104	16.2
20)	T 2-Chloroethyl vinyl ether	0.076	0.072	0.079	0.073	0.079	0.078	0.076	4.2
21)	T Chloroform	0.737	0.717	0.716	0.649	0.666	0.652	0.690	5.5
22)	T Chloromethane	0.130	0.132	0.126	0.114	0.110	0.110	0.120	8.3
23)	T Dibromomethane	0.232	0.233	0.235	0.210	0.211	0.213	0.223	5.4
24)	TP 1,1-Dichloroethane	0.483	0.523	0.487	0.466	0.473	0.459	0.482	4.7
25)	T 1,2-Dichloroethane	0.342	0.338	0.342	0.309	0.303	0.306	0.323	5.9
26)	TCM 1,1-Dichloroethene	0.266	0.266	0.268	0.240	0.246	0.243	0.255	5.1
27)	S 1,2-Dichloroethane	0.068	0.063	0.065	0.063	0.061	0.060	0.063	4.8
28)	T cis-1,2-Dichloroethane	0.325	0.307	0.303	0.281	0.282	0.277	0.296	6.3
29)	T trans-1,2-Dichloroethane	0.288	0.282	0.283	0.258	0.269	0.261	0.273	4.6
30)	T 1,3-Dichloropropane	0.307	0.285	0.295	0.277	0.274	0.280	0.287	4.4
31)	T 1,1-Dichloropropene	0.454	0.473	0.469	0.424	0.441	0.438	0.450	4.2
32)	T Ethyl methacrylate	0.164	0.161	0.180	0.169	0.178	0.177	0.171	4.8
33)	T Methylene chloride	0.248	0.231	0.230	0.223	0.220	0.212	0.227	5.3
34)	T Methyl methacrylate	0.068	0.070	0.068	0.069	0.072	0.072	0.070	2.4
35)	S Toluene-d8	0.912	0.936	0.918	0.883	0.919	0.873	0.907	2.6
36)	TC Vinyl chloride	0.174	0.187	0.186	0.171	0.177	0.174	0.178	3.7
37)	I Chlorobenzene-d5			----- ISTD -----					
38)	TM Benzene	0.904	0.909	0.912	0.846	0.908	0.880	0.893	2.9
39)	T Bromodichloromethane	0.602	0.559	0.570	0.527	0.570	0.573	0.567	4.2
40)	T Carbon tetrachloride	0.824	0.823	0.788	0.712	0.742	0.745	0.772	6.0
'1)	T Chlorodibromomethane	0.360	0.333	0.333	0.323	0.362	0.358	0.345	4.9

(#) = Out of Range

M691.M

Thu Jul 31 14:08:17 1997

MSD5

Page 1

## Response Factor Report MSD5

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M

Title : 6/91 IEA MSDS

Last Update : Thu Jul 31 14:03:48 1997

Response via : Initial Calibration

## Calibration Files

1	=0731501.D	2	=0731502.D	5	=0731503.D
10	=0731504.D	25	=0731506.D	20	=0731505.D

	Compound	1	2	5	10	25	20	Avg	%RS
42)	TPM Chlorobenzene	0.953	0.969	0.954	0.908	0.931	0.931	0.941-	2.3
43)	T 1,2-Dibromoethane	0.362	0.366	0.372	0.340	0.346	0.352	0.356-	3.4
44)	T cis-1,4-Dichloro-2-	0.045	0.040	0.041	0.056	0.060	0.058	0.050	17.8
45)	T trans-1,4-Dichloro-	0.064	0.075	0.070	0.062	0.071	0.073	0.069	7.2
46)	TP 1,2-Dichloropropane	0.362	0.357	0.354	0.333	0.347	0.343	0.349	3.0
47)	T cis-1,3-Dichloropro	0.512	0.515	0.522	0.496	0.515	0.504	0.511-	1.8
48)	T trans-1,3-Dichlorop	0.383	0.403	0.402	0.383	0.386	0.387	0.390-	2.3
49)	TC Ethylbenzene	1.437	1.496	1.467	1.369	1.452	1.438	1.443-	2.9
50)	T 2-Hexanone	0.051	0.058	0.065	0.062	0.064	0.064	0.061	8.4
51)	T 4-Methyl-2-pentanon	0.083	0.097	0.107	0.102	0.101	0.104	0.099	5
52)	T Styrene	0.852	0.857	0.868	0.822	0.840	0.845	0.848-	8
53)	T 1,1,1,2-Tetrachloro	0.501	0.484	0.485	0.455	0.463	0.472	0.477	3.4
54)	TP 1,1,2,2-Tetrachloro	0.272	0.289	0.302	0.281	0.279	0.291	0.286-	3.6
55)	T Tetrachloroethene	0.509	0.508	0.494	0.456	0.474	0.471	0.485-	4.4
56)	TCM Toluene	1.123	1.142	1.162	1.074	1.162	1.141	1.134-	2.9
57)	T 1,1,1-Trichloroetha	0.883	0.865	0.844	0.760	0.783	0.784	0.820-	6.1
58)	T 1,1,2-Trichloroetha	0.273	0.250	0.254	0.234	0.236	0.242	0.248-	5.7
59)	TM Trichloroethene	0.561	0.541	0.541	0.492	0.515	0.510	0.527-	4.7
60)	T m,p-Xylene	0.544	0.569	0.556	0.507	0.537	0.531	0.541	3.9
61)	T o-Xylene	0.537	0.541	0.533	0.502	0.514	0.515	0.524	2.9
62)	T Xylene (total)	0.537	0.541	0.533	0.502	0.514	0.515	0.524-	2.9
63)	I 1,4-Dichlorobenzene-d	-----	-----	-----	ISTD-----	-----	-----	-----	-----
64)	T Bromoform	0.286	0.269	0.271	0.262	0.303	0.318	0.285-	7.7
65)	T Bromobenzene	0.843	0.824	0.813	0.790	0.798	0.819	0.815	2.3
66)	T n-Butylbenzene	2.125	2.300	2.334	2.107	2.442	2.506	2.302	7.0
67)	T tert-Butylbenzene	2.959	2.997	2.823	2.658	2.768	2.843	2.841	3
68)	T sec-Butylbenzene	3.218	3.361	3.220	3.035	3.278	3.353	3.244	3.6
69)	T n-Propylbenzene	2.946	3.075	3.038	2.915	3.151	3.229	3.059	3.9
70)	T 2-Chlorotoluene	2.138	2.273	2.123	1.991	2.094	2.153	2.129	4.2
71)	T 4-Chlorotoluene	2.288	2.539	2.441	2.285	2.381	2.472	2.401	4.2
72)	T 1,2-Dibromo-3-chlor	0.064	0.073	0.067	0.061	0.070	0.075	0.068	7.6
73)	T 1,2-Dichlorobenzene	1.263	1.282	1.267	1.210	1.210	1.276	1.251-	2.6
74)	T 1,3-Dichlorobenzene	1.434	1.484	1.469	1.437	1.495	1.534	1.475-	2.5
75)	T 1,4-Dichlorobenzene	1.582	1.563	1.570	1.486	1.528	1.581	1.552-	2.4
76)	T Hexachlorobutadiene	0.855	0.850	0.814	0.764	0.774	0.788	0.807	4.7
77)	T p-Isopropyltoluene	2.485	2.511	2.458	2.312	2.513	2.569	2.475	3.5
78)	T Naphthalene	0.404	0.456	0.521	0.409	0.598	0.586	0.496	17.2
79)	T Pentachloroethane	0.560	0.523	0.531	0.513	0.527	0.548	0.534	3.2
80)	T 1,2,4-Trichlorobenz	0.596	0.684	0.720	0.667	0.766	0.783	0.703	9.8
81)	T 1,2,3-Trichlorobenz	0.504	0.556	0.611	0.522	0.595	0.610	0.567	8.1
82)	T 1,2,3-Trichloroprop	0.287	0.427	0.427	0.404	0.414	0.430	0.398	13.9
83)	T 1,3,5-Trimethylbenz	2.213	2.295	2.183	2.052	2.175	2.248	2.194	3.7
4)	T 1,2,4-Trimethylbenz	2.281	2.277	2.237	2.072	2.266	2.310	2.240	3.8

(#) = Out of Range

M691.M

Thu Jul 31 14:08:23 1997

MSD5

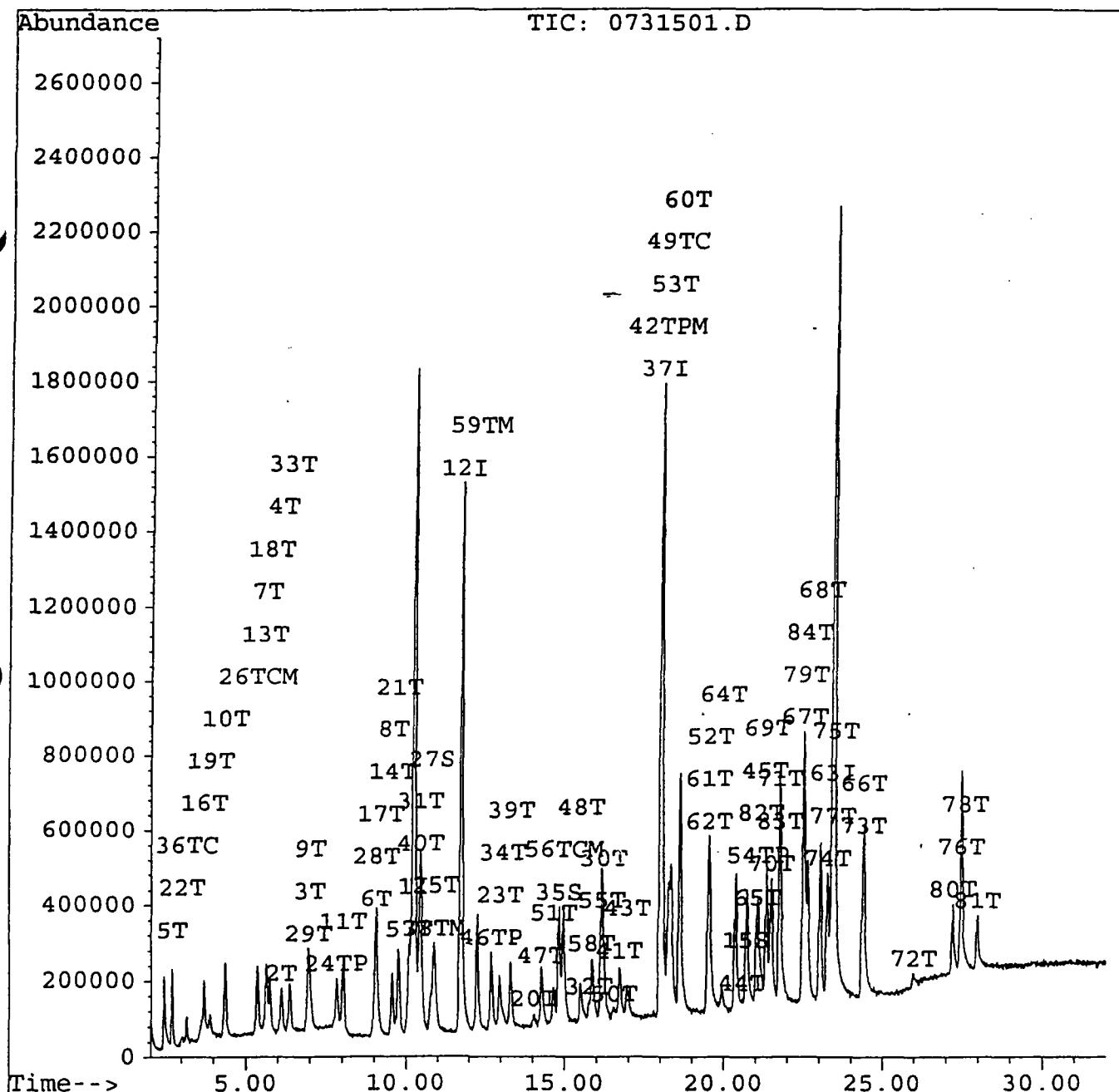
Page 2

Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731501.d  
 Acq On : 31 Jul 97 8:03 am  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 14:03 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731501.d  
 Acq On : 31 Jul 97 8:03 am  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 14:03 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.24	168	3679931	5.00	µg/L	0.03
12) 1,4-Difluorobenzene	11.73	114	3653317	5.00	µg/L	0.02
37) Chlorobenzene-d5	18.00	117	2963044	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.41	152	1626626	5.00	µg/L	0.02

## System Monitoring Compounds

System Monitoring Compounds	R.T.	QIon	Response	%Recovery
15) 4-Bromofluorobenzene	20.72	95	473757	1.04 µg/Lm / 20.75%
27) 1,2-Dichloroethane-d4	10.78	102	49981	1.04 µg/Lm / 20.88%
35) Toluene-d8	14.84	98	666713	0.94 µg/Ls // 18.8%

## Target Compounds

Target Compounds	R.T.	QIon	Response	Qvalue
2) Acetonitrile	6.12	41	208559	0.69 µg/L 100
3) Acrylonitrile	7.01	53	19824	1.20 µg/L m 100
4) Allyl chloride	6.13	76	90472	1.00 µg/L # 62
5) Dichlorodifluoromethane	2.70	85	381110	1.50 µg/L 95
6) 2,2-Dichloropropane	9.04	77	419981	1.05 µg/L 100
7) Iodomethane	5.63	142	568041	1.07 µg/L 99
8) Methacrylonitrile	9.59	41	28891	0.72 µg/L m 11
9) Methyl-tert-Butyl ether	7.02	73	280739	1.05 µg/L 94
10) Trichlorofluoromethane	4.35	101	499031	1.09 µg/L 100
11) Vinyl acetate	8.03	43	156752	0.75 µg/L # 83
13) Acetone	5.56	43	59662	3.89 µg/L m 95
14) Bromochloromethane	9.57	128	135431	1.15 µg/L m 77
16) Bromomethane	3.70	94	167650	1.12 µg/L 94
17) 2-Butanone	9.20	43	88444	3.37 µg/L # 82
18) Carbon disulfide	5.77	76	523223	1.30 µg/L 5
19) Chloroethane	3.89	64	90357	1.10 µg/L m 96
20) 2-Chloroethyl vinyl ether	14.05	63	55560	0.95 µg/L # 90
21) Chloroform	9.76	83	538307	1.08 µg/L 99
22) Chloromethane	3.01	50	94699	0.75 µg/L 95
23) Dibromomethane	12.96	93	169813	0.89 µg/L 99
24) 1,1-Dichloroethane	7.83	63	352885	0.86 µg/L # 96
25) 1,2-Dichloroethane	10.94	62	250184	0.89 µg/L 97
26) 1,1-Dichloroethene	5.35	96	194109	1.09 µg/L 98
28) cis-1,2-Dichloroethene	9.06	96	237170	0.99 µg/L 95
29) trans-1,2-Dichloroethene	6.96	96	210392	1.07 µg/L 92
30) 1,3-Dichloropropane	16.23	76	224657	0.95 µg/L 89
31) 1,1-Dichloropropene	10.45	75	331662	0.94 µg/L 99
32) Ethyl methacrylate	15.77	69	119643	0.85 µg/L m 90
33) Methylene chloride	6.37	84	181027	1.00 µg/L # 83
34) Methyl methacrylate	13.06	69	49967	0.90 µg/L m 87
36) Vinyl chloride	3.16	62	127062	0.85 µg/L 88
38) Benzene	10.87	78	535957	0.91 µg/L 100
39) Bromodichloromethane	13.31	83	356802	0.84 µg/L 99

(#) = qualifier out of range (m) = manual integration

0731501.d M691.M Thu Jul 31 14:14:25 1997 MSD5

Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731501.d  
 Acq On : 31 Jul 97 8:03 am  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 14:03 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.43	117	488041	1.02	µg/L	99
41) Chlorodibromomethane	16.73	129	213346	0.76	µg/L	# 96
42) Chlorobenzene	18.05	112	564675	1.04	µg/L	95
43) 1,2-Dibromoethane	16.95	107	214473	0.92	µg/L	97
44) cis-1,4-Dichloro-2-butene	20.59	75	13366	0.54	µg/L	m 1
45) trans-1,4-Dichloro-2-butene	21.28	53	18957	0.42	µg/L	m 1
46) 1,2-Dichloropropane	12.70	63	214720	0.87	µg/L	# 95
47) cis-1,3-Dichloropropene	14.28	75	303175	1.05	µg/L	97
48) trans-1,3-Dichloropropene	15.52	75	226813	1.10	µg/L	97
49) Ethylbenzene	18.34	91	851704	0.98	µg/L	99
50) 2-Hexanone	16.55	43	152264	2.98	µg/L	m 65
51) 4-Methyl-2-pentanone	14.68	43	245549	2.75	µg/L	# 93
52) Styrene	19.57	104	505093	1.12	µg/L	m 95
53) 1,1,1,2-Tetrachloroethane	18.25	131	297155	0.98	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.08	83	161389	0.89	µg/L	# 84
55) Tetrachloroethene	16.16	164	301414	1.03	µg/L	96
56) Toluene	14.98	91	665233	0.74	µg/L	98
57) 1,1,1-Trichloroethane	10.09	97	523243	1.07	µg/L	87
58) 1,1,2-Trichloroethane	15.88	97	161598	1.11	µg/L	91
59) Trichloroethene	12.25	95	332346	1.08	µg/L	94
60) m,p-Xylene	18.61	106	644778	2.05	µg/L	88
61) o-Xylene	19.51	106	318248	1.06	µg/L	96
62) Xylene (total)	19.51	106	318248	1.06	µg/L	98
64) Bromoform	19.94	173	93078	0.66	µg/L	m 99
65) Bromobenzene	21.04	156	274333	1.00	µg/L	97
66) n-Butylbenzene	24.39	91	691296	0.96	µg/L	97
67) tert-Butylbenzene	22.50	119	962604	1.05	µg/L	93
68) sec-Butylbenzene	23.03	105	1046918	1.04	µg/L	100
69) n-Propylbenzene	21.33	91	958288	0.97	µg/L	99
70) 2-Chlorotoluene	21.49	91	695474	0.98	µg/L	98
71) 4-Chlorotoluene	21.77	91	744486	0.93	µg/L	98
72) 1,2-Dibromo-3-chloropropan	26.00	75	20859	0.69	µg/L	m 77
73) 1,2-Dichlorobenzene	24.35	146	410896	1.02	µg/L	98
74) 1,3-Dichlorobenzene	23.26	146	466380	0.98	µg/L	98
75) 1,4-Dichlorobenzene	23.48	146	514561	1.00	µg/L	98
76) Hexachlorobutadiene	27.46	225	278046	0.94	µg/L	99
77) p-Isopropyltoluene	23.40	119	808476	1.01	µg/L	96
78) Naphthalene	27.58	128	131487	0.79	µg/L	m 100
79) Pentachloroethane	22.53	167	182074	0.96	µg/L	94
80) 1,2,4-Trichlorobenzene	27.20	180	193948	0.72	µg/L	98
81) 1,2,3-Trichlorobenzene	27.97	180	164116	0.83	µg/L	100
82) 1,2,3-Trichloropropane	21.17	75	93342	0.60	µg/L	m 87
83) 1,3,5-Trimethylbenzene	21.77	105	719871	1.04	µg/L	98
84) 1,2,4-Trimethylbenzene	22.63	105	741959	1.03	µg/L	m 98

(#) = qualifier out of range (m) = manual integration

0731501.d M691.M Thu Jul 31 14:14:27 1997 MSD5

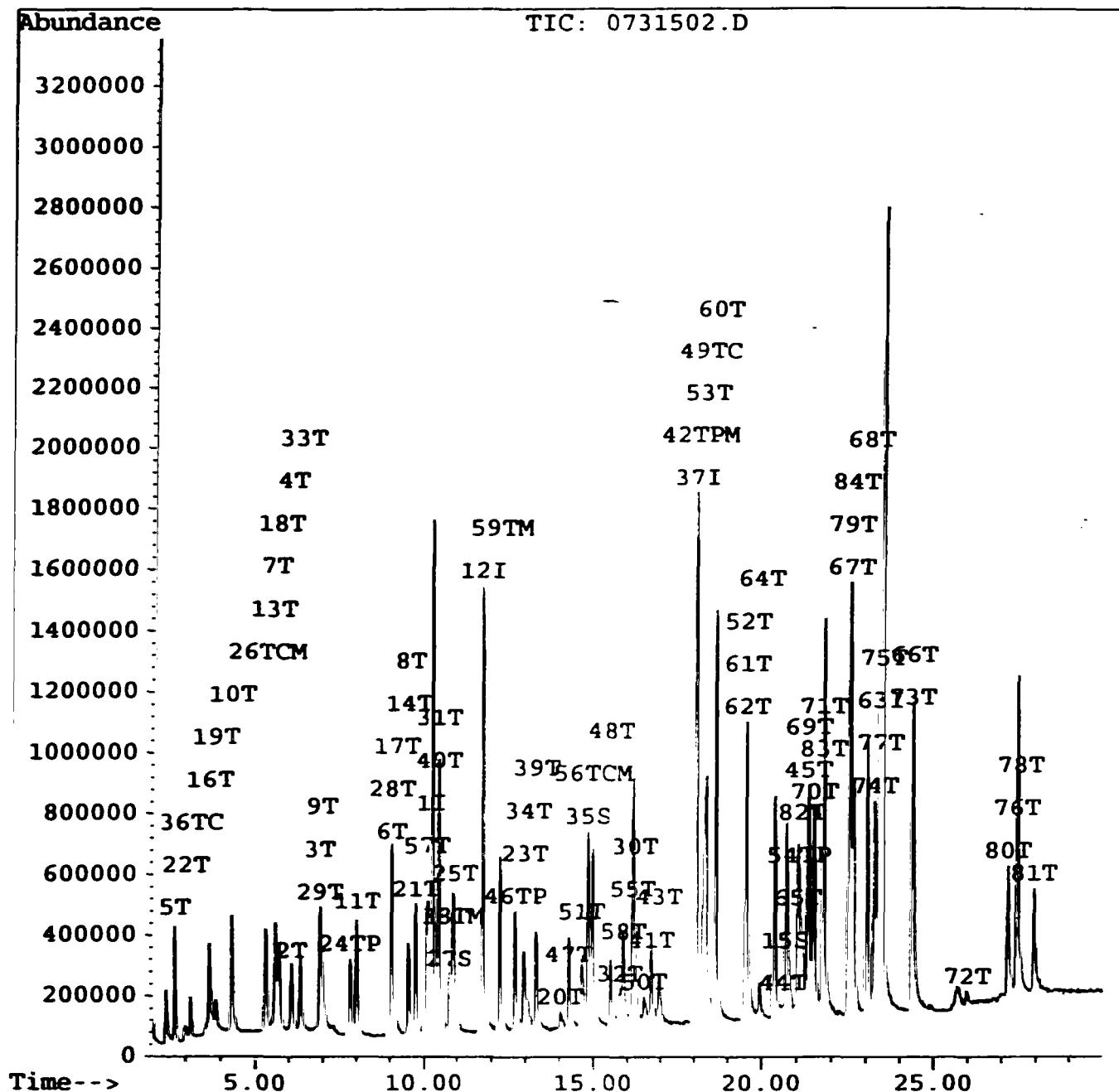
Page 2

Quantitation Report

**Data File :** c:\hpchem\1\data\9707315.b\0731502.d  
**Acq On :** 31 Jul 97 8:45 am  
**Sample :** VSTD002 IEA MSD5  
**Misc :** WATER LOW 1X  
**Quant Time:** Jul 31 13:58 1997

**Vial:** 1  
**Operator:** MOORE  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** C:\HPCHEM\1\DATA\9707315.B\M691.M  
**Title :** 6/91 IEA MSD5  
**Last Update :** Thu Jul 31 14:06:02 1997  
**Response via :** Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731502.d  
 Acq On : 31 Jul 97 8:45 am  
 Sample : VSTD002 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:58 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.22	168	3432015	5.00	µg/L	0.00
12) 1,4-Difluorobenzene	11.71	114	3568698	5.00	µg/L	0.00
37) Chlorobenzene-d5	18.00	117	2893332	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.40	152	1607985	5.00	µg/L	0.02
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.70	95	876524	1.96	µg/L	39.30%
27) 1,2-Dichloroethane-d4	10.75	102	90063	1.93	µg/Lm	38.52%
35) Toluene-d8	14.82	98	1335875	1.94	µg/Lshk	38.73%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	6.09	41	401219	1.43	µg/L	100
3) Acrylonitrile	6.92	53	32283	2.09	µg/L #	100
4) Allyl chloride	6.07	76	162751	1.92	µg/L	72
5) Dichlorodifluoromethane	2.68	85	716043	3.03	µg/L	97
6) 2,2-Dichloropropane	9.01	77	837049	2.24	µg/L	99
7) Iodomethane	5.60	142	1128108	2.28	µg/L	98
8) Methacrylonitrile	9.56	41	59348	1.58	µg/L #	87
9) Methyl-tert-Butyl ether	6.98	73	524971	2.10	µg/L #	72
10) Trichlorofluoromethane	4.32	101	986328	2.30	µg/L	98
11) Vinyl acetate	8.01	43	328166	1.67	µg/L #	85
13) Acetone	5.51	43	106903	7.14	µg/L	93
14) Bromochloromethane	9.53	128	245406	2.14	µg/L #	82
16) Bromomethane	3.67	94	342663	2.35	µg/L	98
17) 2-Butanone	9.18	43	175902	6.86	µg/L	94
18) Carbon disulfide	5.71	76	1022355	2.60	µg/L	98
19) Chloroethane	3.86	64	179391	2.23	µg/L	96
20) 2-Chloroethyl vinyl ether	14.03	63	102246	1.78	µg/L #	84
21) Chloroform	9.74	83	1023352	2.10	µg/L	99
22) Chloromethane	2.98	50	188632	1.52	µg/L	98
23) Dibromomethane	12.94	93	333045	1.79	µg/L	98
24) 1,1-Dichloroethane	7.80	63	746823	1.87	µg/L	97
25) 1,2-Dichloroethane	10.92	62	481852	1.75	µg/L	97
26) 1,1-Dichloroethene	5.32	96	379509	2.19	µg/L	97
28) cis-1,2-Dichloroethene	9.04	96	437625	1.87	µg/L	98
29) trans-1,2-Dichloroethene	6.92	96	403255	2.11	µg/L	98
30) 1,3-Dichloropropane	16.23	76	407374	1.77	µg/L #	82
31) 1,1-Dichloropropene	10.43	75	674668	1.96	µg/L	100
32) Ethyl methacrylate	15.77	69	229245	1.66	µg/L	89
33) Methylene chloride	6.33	84	330163	1.87	µg/L	86
34) Methyl methacrylate	13.08	69	99706	1.83	µg/L m	91
36) Vinyl chloride	3.14	62	266473	1.82	µg/L	99
38) Benzene	10.85	78	1052082	1.84	µg/L	100
39) Bromodichloromethane	13.31	83	646880	1.55	µg/L	97

(#) = qualifier out of range (m) = manual integration

0731502.d M691.M Thu Jul 31 14:14:56 1997 MSD5 Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731502.d  
 Acq On : 31 Jul 97 8:45 am  
 Sample : VSTD002 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:58 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.42	117	952385	2.03	µg/L	99
41) Chlorodibromomethane	16.72	129	385032	1.40	µg/L #	94
42) Chlorobenzene	18.06	112	1121619	2.13	µg/L	98
43) 1,2-Dibromoethane	16.95	107	423859	1.86	µg/L	100
44) cis-1,4-Dichloro-2-butene	20.63	75	23133	0.95	µg/L m	1
45) trans-1,4-Dichloro-2-butene	21.31	53	43488	0.98	µg/L m	1
46) 1,2-Dichloropropane	12.68	63	412881	1.71	µg/L #	95
47) cis-1,3-Dichloropropene	14.27	75	596280	2.11	µg/L	98
48) trans-1,3-Dichloropropene	15.50	75	466069	2.32	µg/L	99
49) Ethylbenzene	18.34	91	1731772	2.05	µg/L	99
50) 2-Hexanone	16.50	43	334318	6.71	µg/L m	87
51) 4-Methyl-2-pentanone	14.64	43	563829	6.46	µg/L #	86
52) Styrene	19.54	104	992005	2.26	µg/L	96
53) 1,1,1,2-Tetrachloroethane	18.25	131	559959	1.89	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.07	83	334982	1.88	µg/L	97
55) Tetrachloroethylene	16.16	164	587408	2.06	µg/L	96
56) Toluene	14.97	91	1321324	1.51	µg/L	100
57) 1,1,1-Trichloroethane	10.08	97	1000626	2.09	µg/L	97
58) 1,1,2-Trichloroethane	15.88	97	288812	2.04	µg/L	99
59) Trichloroethylene	12.24	95	626299	2.09	µg/L	98
60) m,p-Xylene	18.61	106	1318190	4.30	µg/L	94
61) o-Xylene	19.51	106	626074	2.14	µg/L	93
62) Xylene (total)	19.51	106	626074	2.14	µg/L	94
64) Bromoform	19.93	173	173153	1.24	µg/L #	99
65) Bromobenzene	21.01	156	530106	1.96	µg/L	97
66) n-Butylbenzene	24.37	91	1479190	2.07	µg/L	99
67) tert-Butylbenzene	22.50	119	1927677	2.13	µg/L	99
68) sec-Butylbenzene	23.03	105	2161605	2.16	µg/L	99
69) n-Propylbenzene	21.32	91	1978083	2.03	µg/L	100
70) 2-Chlorotoluene	21.48	91	1461937	2.08	µg/L	96
71) 4-Chlorotoluene	21.75	91	1633093	2.07	µg/L	98
72) 1,2-Dibromo-3-chloropropan	25.98	75	47146	1.59	µg/L	87
73) 1,2-Dichlorobenzene	24.34	146	824874	2.07	µg/L	98
74) 1,3-Dichlorobenzene	23.25	146	954625	2.03	µg/L	97
75) 1,4-Dichlorobenzene	23.46	146	1005007	1.98	µg/L	97
76) Hexachlorobutadiene	27.45	225	546566	1.87	µg/L	100
77) p-Isopropyltoluene	23.39	119	1615022	2.05	µg/L	95
78) Naphthalene	27.55	128	292995	1.77	µg/L m	100
79) Pentachloroethane	22.51	167	336637	1.80	µg/L	95
80) 1,2,4-Trichlorobenzene	27.18	180	439873	1.66	µg/L	98
81) 1,2,3-Trichlorobenzene	27.94	180	357559	1.82	µg/L	98
82) 1,2,3-Trichloropropane	21.15	75	274923	1.78	µg/L #	24
83) 1,3,5-Trimethylbenzene	21.75	105	1476231	2.15	µg/L	97
84) 1,2,4-Trimethylbenzene	22.62	105	1464539	2.07	µg/L	99

(#) = qualifier out of range (m) = manual integration

0731502.d M691.M Thu Jul 31 14:14:58 1997 MSD5

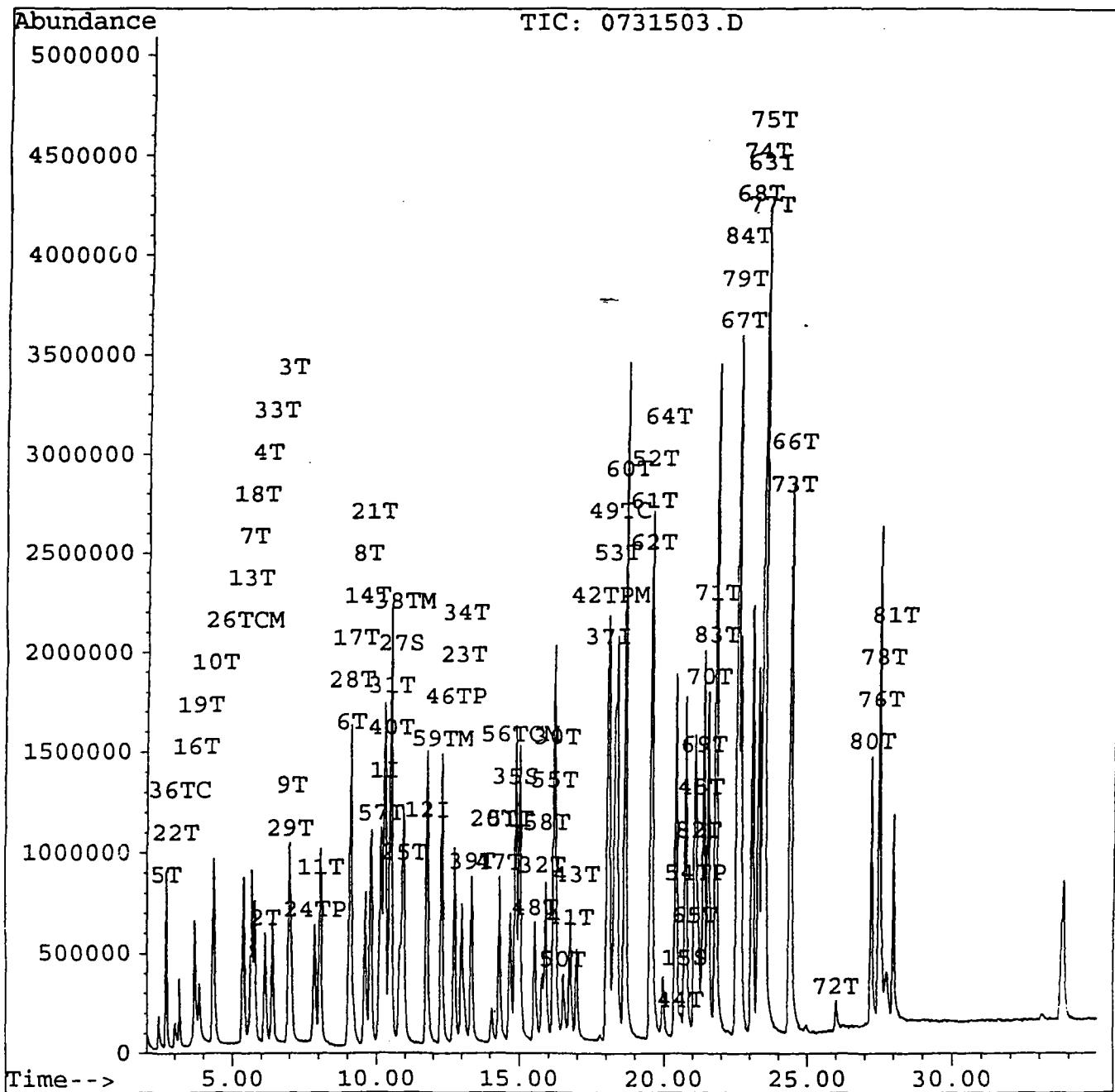
Page 2

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731503.d  
 Acq On : 31 Jul 97 9:38 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 12:41 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731503.d  
 Acq On : 31 Jul 97 9:38 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 12:41 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.26	168	3420814	5.00	µg/L	0.04
12) 1,4-Difluorobenzene	11.76	114	3529933	5.00	µg/L	0.05
37) Chlorobenzene-d5	18.01	117	2823175	5.00	µg/L	0.02
63) 1,4-Dichlorobenzene-d4	23.43	152	1627445	5.00	µg/L	0.05
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.73	95	2139404	4.85	µg/L	96.97%
27) 1,2-Dichloroethane-d4	10.80	102	228974	4.95	µg/L	99.02%
35) Toluene-d8	14.86	98	3240067	4.75	µg/L	94.96%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	6.13	41	958720	3.42	µg/L	100
3) Acrylonitrile	6.94	53	68205	4.43	µg/L #	100
4) Allyl chloride	6.12	76	436403	5.16	µg/L m	99
5) Dichlorodifluoromethane	2.69	85	1707997	7.24	µg/L Sbfk,	96
6) 2,2-Dichloropropane	9.05	77	2011540	5.41	µg/L	97
7) Iodomethane	5.65	142	2737944	5.55	µg/L	99
8) Methacrylonitrile	9.61	41	136199	3.64	µg/L #	79
9) Methyl-tert-Butyl ether	7.05	73	1340874	5.39	µg/L #	90
10) Trichlorofluoromethane	4.34	101	2390881	5.60	µg/L	100
11) Vinyl acetate	8.05	43	823682	4.21	µg/L #	89
13) Acetone	5.57	43	315863	21.32	µg/L	91
14) Bromochloromethane	9.58	128	612219	5.40	µg/L #	80
16) Bromomethane	3.69	94	820881	5.69	µg/L	100
17) 2-Butanone	9.21	43	452678	17.85	µg/L #	81
18) Carbon disulfide	5.76	76	2503669	6.44	µg/L	
19) Chloroethane	3.85	64	374369	4.71	µg/L	
20) 2-Chloroethyl vinyl ether	14.05	63	279050	4.92	µg/L #	88
21) Chloroform	9.78	83	2528911	5.24	µg/L	98
22) Chloromethane	3.00	50	445926	3.64	µg/L	95
23) Dibromomethane	12.99	93	828857	4.50	µg/L	99
24) 1,1-Dichloroethane	7.85	63	1718029	4.35	µg/L	98
25) 1,2-Dichloroethane	10.95	62	1206632	4.43	µg/L	100
26) 1,1-Dichloroethene	5.36	96	944661	5.51	µg/L	100
28) cis-1,2-Dichloroethene	9.09	96	1068430	4.61	µg/L	98
29) trans-1,2-Dichloroethene	5.97	96	998906	5.28	µg/L	97
30) 1,3-Dichloropropane	16.26	76	1040796	4.58	µg/L	88
31) 1,1-Dichloropropene	10.48	75	1654459	4.85	µg/L	98
32) Ethyl methacrylate	15.79	69	635928	4.67	µg/L #	90
33) Methylene chloride	6.39	84	811818	4.66	µg/L	86
34) Methyl methacrylate	13.08	69	241344	4.48	µg/L	89
36) Vinyl chloride	3.16	62	656901	4.54	µg/L	100
38) Benzene	10.90	78	2575523	4.61	µg/L	100
39) Bromodichloromethane	13.33	83	1608595	3.95	µg/L	99

(#) = qualifier out of range (m) = manual integration

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731503.d  
 Acq On : 31 Jul 97 9:38 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 12:41 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.46	117	2225345	4.86	µg/L	100
41) Chlorodibromomethane	16.74	129	940085	3.51	µg/L	# 88
42) Chlorobenzene	18.08	112	2693215	5.23	µg/L	99
43) 1,2-Dibromoethane	16.97	107	1049855	4.73	µg/L	99
44) cis-1,4-Dichloro-2-butene	20.59	75	57754	2.44	µg/L	# 1
45) trans-1,4-Dichloro-2-butene	21.27	53	98747	2.28	µg/L	# 4
46) 1,2-Dichloropropane	12.73	63	999427	4.24	µg/L	# 95
47) cis-1,3-Dichloropropene	14.30	75	1473684	5.34	µg/L	99
48) trans-1,3-Dichloropropene	15.52	75	1133550	5.78	µg/L	100
49) Ethylbenzene	18.36	91	4141885	5.01	µg/L	100
50) 2-Hexanone	16.51	43	912342	18.76	µg/L	# 89
51) 4-Methyl-2-pentanone	14.68	43	1503367	17.66	µg/L	# 87
52) Styrene	19.56	104	2450767	5.73	µg/L	97
53) 1,1,1,2-Tetrachloroethane	18.27	131	1367829	4.72	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.10	83	853458	4.92	µg/L	98
55) Tetrachloroethene	16.18	164	1394950	5.02	µg/L	97
56) Toluene	15.00	91	3279895	3.84	µg/L	98
57) 1,1,1-Trichloroethane	10.12	97	2381403	5.10	µg/L	95
58) 1,1,2-Trichloroethane	15.90	97	716528	5.18	µg/L	98
59) Trichloroethene	12.27	95	1528131	5.23	µg/L	98
60) m,p-Xylene	18.63	106	3141155	10.50	µg/L	92
61) o-Xylene	19.52	106	1505548	5.28	µg/L	92
62) Xylene (total)	19.52	106	1505548	5.28	µg/L	94
64) Bromoform	19.97	173	440298	3.12	µg/L	# 99
65) Bromobenzene	21.04	156	1323200	4.83	µg/L	95
66) n-Butylbenzene	24.41	91	3798991	5.25	µg/L	99
67) tert-Butylbenzene	22.54	119	4593789	5.02	µg/L	98
68) sec-Butylbenzene	23.06	105	5239889	5.18	µg/L	99
69) n-Propylbenzene	21.35	91	4943517	5.01	µg/L	99
70) 2-Chlorotoluene	21.53	91	3454329	4.85	µg/L	98
71) 4-Chlorotoluene	21.78	91	3973119	4.98	µg/L	98
72) 1,2-Dibromo-3-chloropropan	25.99	75	109395	3.64	µg/L	96
73) 1,2-Dichlorobenzene	24.37	146	2062642	5.10	µg/L	98
74) 1,3-Dichlorobenzene	23.28	146	2390633	5.02	µg/L	98
75) 1,4-Dichlorobenzene	23.49	146	2554598	4.98	µg/L	95
76) Hexachlorobutadiene	27.48	225	1324100	4.48	µg/L	100
77) p-Isopropyltoluene	23.42	119	3999565	5.01	µg/L	95
78) Naphthalene	27.58	128	847587	5.07	µg/L	100
79) Pentachloroethane	22.55	167	864437	4.57	µg/L	94
80) 1,2,4-Trichlorobenzene	27.20	180	1171493	4.37	µg/L	95
81) 1,2,3-Trichlorobenzene	27.97	180	994215	5.01	µg/L	95
82) 1,2,3-Trichloropropane	21.18	75	695510	4.45	µg/L	87
83) 1,3,5-Trimethylbenzene	21.78	105	3552415	5.11	µg/L	98
84) 1,2,4-Trimethylbenzene	22.65	105	3640794	5.08	µg/L	97

(#) = qualifier out of range (m) = manual integration

0731503.d M691.M Thu Jul 31 14:15:38 1997 MSD5

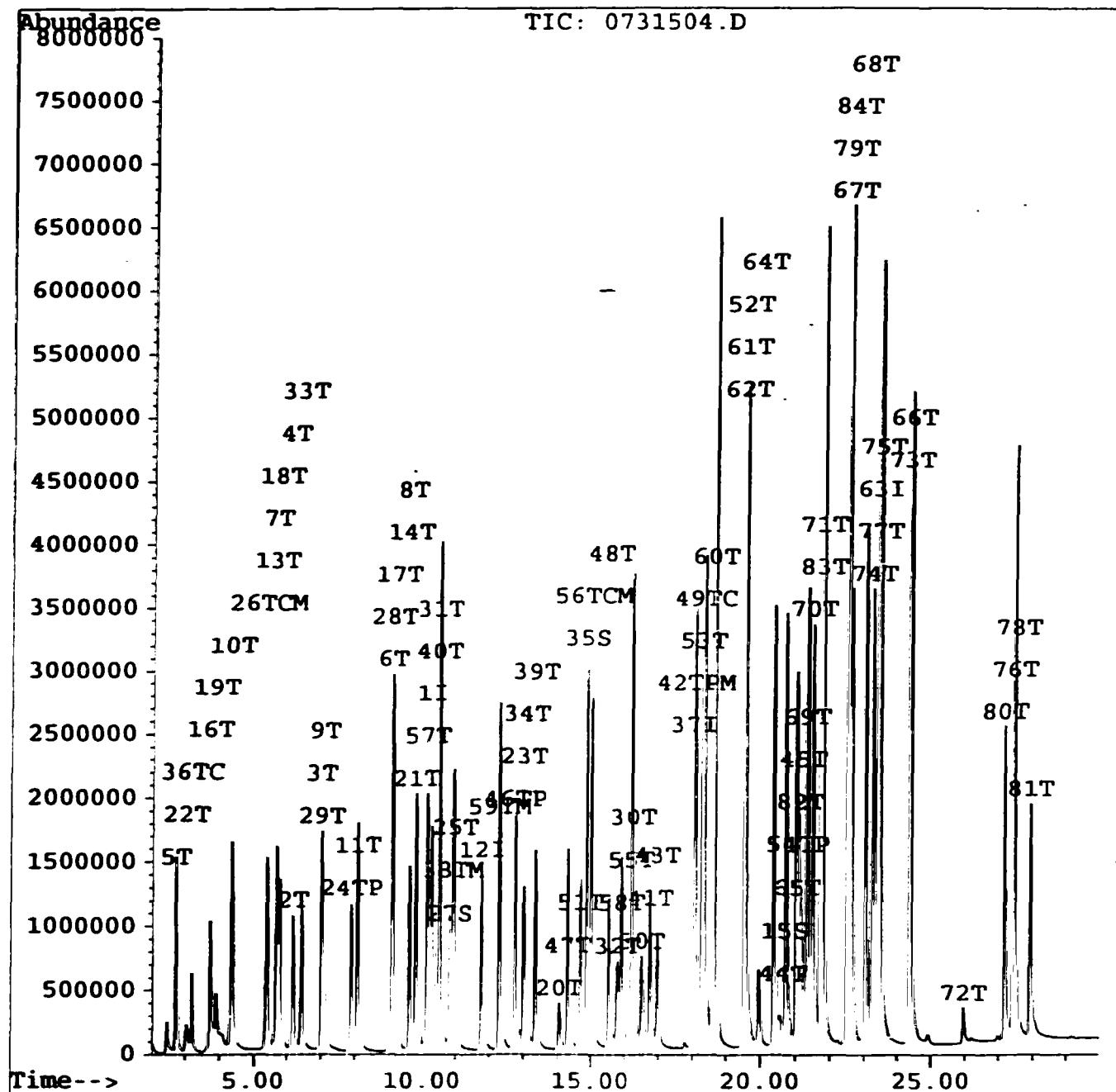
Page 2

Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731504.d  
 Acq On : 31 Jul 97 10:55 am  
 Sample : VSTD010 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:07 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731504.d  
 Acq On : 31 Jul 97 10:55 am  
 Sample : VSTD010 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:07 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.30	168	3386318	5.00	µg/L	0.09
12) 1,4-Difluorobenzene	11.79	114	3541781	5.00	µg/L	0.08
37) Chlorobenzene-d5	18.02	117	2850317	5.00	µg/L	0.03
63) 1,4-Dichlorobenzene-d4	23.41	152	1615602	5.00	µg/L	0.02
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.71	95	4115173	9.30	µg/L	185.91%
27) 1,2-Dichloroethane-d4	10.84	102	448219	9.66	µg/L	193.18%
35) Toluene-d8	14.87	98	6257156	9.14	µg/L	182.78%
<b>Target Compounds</b>						Qvalue
2) Acetonitrile	6.18	41	1787376	6.43	µg/L	100
3) Acrylonitrile	7.02	53	126659	8.31	µg/L	# 100
4) Allyl chloride	6.18	76	783461	9.37	µg/L	# 63
5) Dichlorodifluoromethane	2.73	85	3094521	13.26	µg/L	96
6) 2,2-Dichloropropane	9.12	77	3689344	10.02	µg/L	97
7) Iodomethane	5.69	142	4965363	10.16	µg/L	99
8) Methacrylonitrile	9.68	41	244364	6.59	µg/L	# 71
9) Methyl-tert-Butyl ether	7.12	73	2393356	9.71	µg/L	92
10) Trichlorofluoromethane	4.36	101	4162309	9.85	µg/L	99
11) Vinyl acetate	8.11	43	1530161	7.91	µg/L	# 90
13) Acetone	5.65	43	521859	35.10	µg/L	94
14) Bromochloromethane	9.63	128	1131704	9.94	µg/L	# 81
16) Bromomethane	3.73	94	1478191	10.22	µg/L	Skipped
17) 2-Butanone	9.27	43	963503	37.88	µg/L	m 99
18) Carbon disulfide	5.80	76	4636332	11.89	µg/L	100
19) Chloroethane	3.90	64	647929	8.12	µg/L	98
20) 2-Chloroethyl vinyl ether	14.05	63	514140	9.04	µg/L	# 81
21) Chloroform	9.83	83	4600492	9.49	µg/L	99
22) Chloromethane	3.03	50	807820	6.57	µg/L	98
23) Dibromomethane	13.01	93	1490655	8.07	µg/L	98
24) 1,1-Dichloroethane	7.90	63	3300945	8.33	µg/L	98
25) 1,2-Dichloroethane	10.99	62	2187336	7.99	µg/L	100
26) 1,1-Dichloroethene	5.40	96	1699270	9.87	µg/L	99
28) cis-1,2-Dichloroethene	9.13	96	1992103	8.56	µg/L	98
29) trans-1,2-Dichloroethene	7.01	96	1825343	9.61	µg/L	97
30) 1,3-Dichloropropane	16.26	76	1961040	8.60	µg/L	88
31) 1,1-Dichloropropene	10.51	75	3004175	8.78	µg/L	98
32) Ethyl methacrylate	15.78	69	1194315	8.74	µg/L	# 91
33) Methylene chloride	6.44	84	1582543	9.05	µg/L	85
34) Methyl methacrylate	13.11	69	489243	9.05	µg/L	85
36) Vinyl chloride	3.20	62	1209047	8.33	µg/L	100
38) Benzene	10.93	78	4821737	8.55	µg/L	100
39) Bromodichloromethane	13.36	83	3005502	7.32	µg/L	99

(#) = qualifier out of range (m) = manual integration

0731504.d M691.M Thu Jul 31 14:16:14 1997 MSD5

Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731504.d  
 Acq On : 31 Jul 97 10:55 am  
 Sample : VSTD010 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:07 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.50	117	4059961	8.79	µg/L	100
41) Chlorodibromomethane	16.75	129	1842201	6.81	µg/L	# 89
42) Chlorobenzene	18.09	112	5175148	9.95	µg/L	100
43) 1,2-Dibromoethane	16.97	107	1938874	8.66	µg/L	98
44) cis-1,4-Dichloro-2-butene	20.64	75	160506	6.72	µg/L	m 69
45) trans-1,4-Dichloro-2-butene	21.23	53	178070	4.07	µg/L	# 5
46) 1,2-Dichloropropane	12.76	63	1898306	7.98	µg/L	# 95
47) cis-1,3-Dichloropropene	14.31	75	2825362	10.15	µg/L	99
48) trans-1,3-Dichloropropene	15.53	75	2181818	11.03	µg/L	
49) Ethylbenzene	18.35	91	7804916	9.36	µg/L	100
50) 2-Hexanone	16.52	43	1778224	36.22	µg/L	# 91
51) 4-Methyl-2-pentanone	14.69	43	2895249	33.69	µg/L	# 86
52) Styrene	19.55	104	4688685	10.86	µg/L	98
53) 1,1,1,2-Tetrachloroethane	18.29	131	2596095	8.88	µg/L	98
54) 1,1,2,2-Tetrachloroethane	21.09	83	1604103	9.16	µg/L	98
55) Tetrachloroethene	16.20	164	2597446	9.26	µg/L	98
56) Toluene	15.01	91	6120074	7.09	µg/L	98
57) 1,1,1-Trichloroethane	10.16	97	4333472	9.19	µg/L	93
58) 1,1,2-Trichloroethane	15.91	97	1331849	9.54	µg/L	97
59) Trichloroethene	12.30	95	2806723	9.51	µg/L	100
60) m,p-Xylene	18.64	106	5783968	19.15	µg/L	87
61) o-Xylene	19.52	106	2859097	9.93	µg/L	92
62) Xylene (total)	19.52	106	2859097	9.93	µg/L	94
64) Bromoform	19.94	173	846546	6.05	µg/L	# 99
65) Bromobenzene	21.03	156	2553443	9.38	µg/L	# 7
66) n-Butylbenzene	24.38	91	6808163	9.48	µg/L	
67) tert-Butylbenzene	22.51	119	8588724	9.45	µg/L	98
68) sec-Butylbenzene	23.03	105	9805908	9.76	µg/L	98
69) n-Propylbenzene	21.34	91	9418513	9.61	µg/L	99
70) 2-Chlorotoluene	21.50	91	6432994	9.09	µg/L	100
71) 4-Chlorotoluene	21.76	91	7384547	9.33	µg/L	99
72) 1,2-Dibromo-3-chloropropan	25.96	75	197888	6.63	µg/L	95
73) 1,2-Dichlorobenzene	24.33	146	3910556	9.75	µg/L	98
74) 1,3-Dichlorobenzene	23.25	146	4644355	9.83	µg/L	98
75) 1,4-Dichlorobenzene	23.46	146	4802657	9.43	µg/L	97
76) Hexachlorobutadiene	27.45	225	2468021	8.41	µg/L	99
77) p-Isopropyltoluene	23.40	119	7471274	9.44	µg/L	96
78) Naphthalene	27.54	128	1321430	7.95	µg/L	100
79) Pentachloroethane	22.53	167	1658078	8.83	µg/L	# 93
80) 1,2,4-Trichlorobenzene	27.17	180	2153623	8.10	µg/L	99
81) 1,2,3-Trichlorobenzene	27.93	180	1687717	8.56	µg/L	98
82) 1,2,3-Trichloropropane	21.16	75	1305914	8.42	µg/L	# 24
83) 1,3,5-Trimethylbenzene	21.76	105	6630491	9.60	µg/L	98
84) 1,2,4-Trimethylbenzene	22.64	105	6695462	9.40	µg/L	97

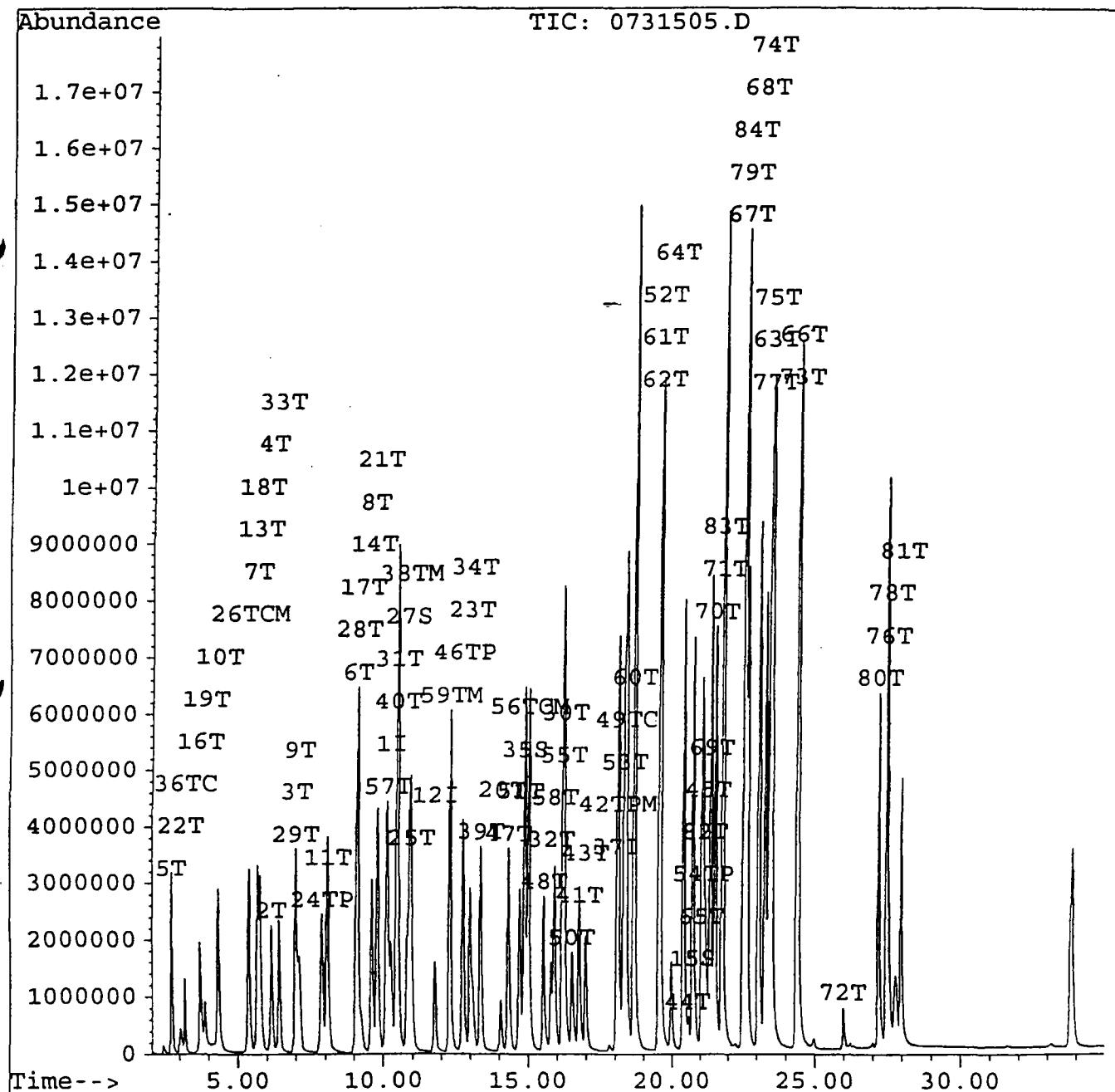
(#) = qualifier out of range (m) = manual integration  
 0731504.d M691.M Thu Jul 31 14:16:17 1997 MSD5 Page 2

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731505.d  
 Acq On : 31 Jul 97 11:47 am  
 Sample : VSTD020 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:33 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731505.d  
 Acq On : 31 Jul 97 11:47 am  
 Sample : VSTD020 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:33 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.26	168	3546030	5.00	µg/L	0.05
12) 1,4-Difluorobenzene	11.75	114	3841627	5.00	µg/L	0.04
37) Chlorobenzene-d5	18.02	117	3067283	5.00	µg/L	0.02
63) 1,4-Dichlorobenzene-d4	23.43	152	1670133	5.00	µg/L	0.04
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.72	95	8494322	17.69	µg/L	353.78%
27) 1,2-Dichloroethane-d4	10.79	102	918484	18.25	µg/L	364.97%
35) Toluene-d8	14.85	98	13408980	18.06	µg/L	361.11%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	6.13	41	3915620	13.46	µg/L	100
3) Acrylonitrile	7.00	53	253987	15.92	µg/L	# 100
4) Allyl chloride	6.13	76	1714962	19.58	µg/L	# 64
5) Dichlorodifluoromethane	2.70	85	6686952	27.36	µg/L	96
6) 2,2-Dichloropropane	9.06	77	8147463	21.13	µg/L	97
7) Iodomethane	5.64	142	10956095	21.41	µg/L	99
8) Methacrylonitrile	9.63	41	557973	14.38	µg/L	# 72
9) Methyl-tert-Butyl ether	7.08	73	5145364	19.94	µg/L	92
10) Trichlorofluoromethane	4.30	101	6850659	15.48	µg/L	99
11) Vinyl acetate	8.07	43	3318864	16.37	µg/L	m 98
13) Acetone	5.69	43	1032060	64.00	µg/L	100
14) Bromochloromethane	9.58	128	2381190	19.29	µg/L	# 83
16) Bromomethane	3.69	94	3291146	20.98	µg/L	99
17) 2-Butanone	9.23	43	1915743	69.43	µg/L	# 84
18) Carbon disulfide	5.74	76	10264083	24.26	µg/L	"
19) Chloroethane	3.86	64	1382874	15.98	µg/L	"
20) 2-Chloroethyl vinyl ether	14.03	63	1196493	19.40	µg/L	# 84
21) Chloroform	9.78	83	10020324	19.06	µg/L	99
22) Chloromethane	3.02	50	1690656	12.68	µg/L	97
23) Dibromomethane	12.97	93	3277395	16.35	µg/L	99
24) 1,1-Dichloroethane	7.86	63	7051714	16.41	µg/L	99
25) 1,2-Dichloroethane	10.95	62	4699616	15.84	µg/L	100
26) 1,1-Dichloroethene	5.34	96	3729123	19.97	µg/L	99
28) cis-1,2-Dichloroethene	9.09	96	4251747	16.85	µg/L	98
29) trans-1,2-Dichloroethene	6.96	96	4010927	19.46	µg/L	98
30) 1,3-Dichloropropane	16.25	76	4308996	17.42	µg/L	89
31) 1,1-Dichloropropene	10.46	75	6725153	18.11	µg/L	98
32) Ethyl methacrylate	15.77	69	2725240	18.38	µg/L	# 89
33) Methylene chloride	6.40	84	3260769	17.19	µg/L	86
34) Methyl methacrylate	13.08	69	1111756	18.97	µg/L	83
36) Vinyl chloride	3.17	62	2681313	17.04	µg/L	98
38) Benzene	10.89	78	10791275	17.78	µg/L	100
39) Bromodichloromethane	13.34	83	7029455	15.90	µg/L	99

(#) = qualifier out of range (m) = manual integration

0731505.d M691.M Thu Jul 31 14:16:54 1997 MSD5

Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731505.d  
 Acq On : 31 Jul 97 11:47 am  
 Sample : VSTD020 IEA MSD5  
 Misc : WATER LOW IX  
 Quant Time: Jul 31 13:33 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.45	117	9137429	18.38	µg/L	100
41) Chlorodibromomethane	16.75	129	4386762	15.06	µg/L	# 88
42) Chlorobenzene	18.08	112	11422025	20.42	µg/L	99
43) 1,2-Dibromoethane	16.96	107	4320719	17.93	µg/L	99
44) cis-1,4-Dichloro-2-butene	20.56	75	352923	13.73	µg/L	m 69
45) trans-1,4-Dichloro-2-butene	21.24	53	446855	9.49	µg/L	# 5
46) 1,2-Dichloropropane	12.73	63	4207941	16.43	µg/L	# 95
47) cis-1,3-Dichloropropene	14.30	75	6188898	20.66	µg/L	100
48) trans-1,3-Dichloropropene	15.51	75	4742679	22.27	µg/L	99
49) Ethylbenzene	18.36	91	17641381	19.66	µg/L	99
50) 2-Hexanone	16.50	43	3895885	73.74	µg/L	# 95
51) 4-Methyl-2-pentanone	14.67	43	6397745	69.18	µg/L	# 87
52) Styrene	19.57	104	10371382	22.32	µg/L	97
53) 1,1,1,2-Tetrachloroethane	18.29	131	5796752	18.42	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.10	83	3565161	18.91	µg/L	99
55) Tetrachloroethene	16.19	164	5774484	19.13	µg/L	97
56) Toluene	14.99	91	13992981	15.07	µg/L	98
57) 1,1,1-Trichloroethane	10.11	97	9617824	18.96	µg/L	# 75
58) 1,1,2-Trichloroethane	15.89	97	2974999	19.81	µg/L	96
59) Trichloroethene	12.27	95	6259447	19.71	µg/L	99
60) m,p-Xylene	18.63	106	13026190	40.09	µg/L	88
61) o-Xylene	19.53	106	6319393	20.40	µg/L	91
62) Xylene (total)	19.53	106	6319393	20.40	µg/L	93
64) Bromoform	19.96	173	2126732	14.69	µg/L	# 98
65) Bromobenzene	21.04	156	5470563	19.45	µg/L	93
66) n-Butylbenzene	24.39	91	16741475	22.54	µg/L	98
67) tert-Butylbenzene	22.53	119	18990188	20.22	µg/L	93
68) sec-Butylbenzene	23.05	105	22397775	21.57	µg/L	98
69) n-Propylbenzene	21.35	91	21568780	21.29	µg/L	98
70) 2-Chlorotoluene	21.51	91	14386343	19.67	µg/L	99
71) 4-Chlorotoluene	21.77	91	16516012	20.18	µg/L	100
72) 1,2-Dibromo-3-chloropropan	25.97	75	499018	16.17	µg/L	98
73) 1,2-Dichlorobenzene	24.35	146	8521297	20.55	µg/L	97
74) 1,3-Dichlorobenzene	23.27	146	10247224	20.98	µg/L	98
75) 1,4-Dichlorobenzene	23.49	146	10561771	20.05	µg/L	97
76) Hexachlorobutadiene	27.46	225	5263543	17.35	µg/L	100
77) p-Isopropyltoluene	23.41	119	17159567	20.97	µg/L	96
78) Naphthalene	27.55	128	3914268	22.79	µg/L	100
79) Pentachloroethane	22.54	167	3662514	18.86	µg/L	# 92
80) 1,2,4-Trichlorobenzene	27.18	180	5230556	19.03	µg/L	98
81) 1,2,3-Trichlorobenzene	27.95	180	4075838	20.00	µg/L	99
82) 1,2,3-Trichloropropane	21.17	75	2869895	17.90	µg/L	# 24
83) 1,3,5-Trimethylbenzene	21.78	105	15020092	21.04	µg/L	98
84) 1,2,4-Trimethylbenzene	22.65	105	15432901	20.97	µg/L	98

(#) = qualifier out of range (m) = manual integration

0731505.d M691.M Thu Jul 31 14:16:57 1997 MSD5

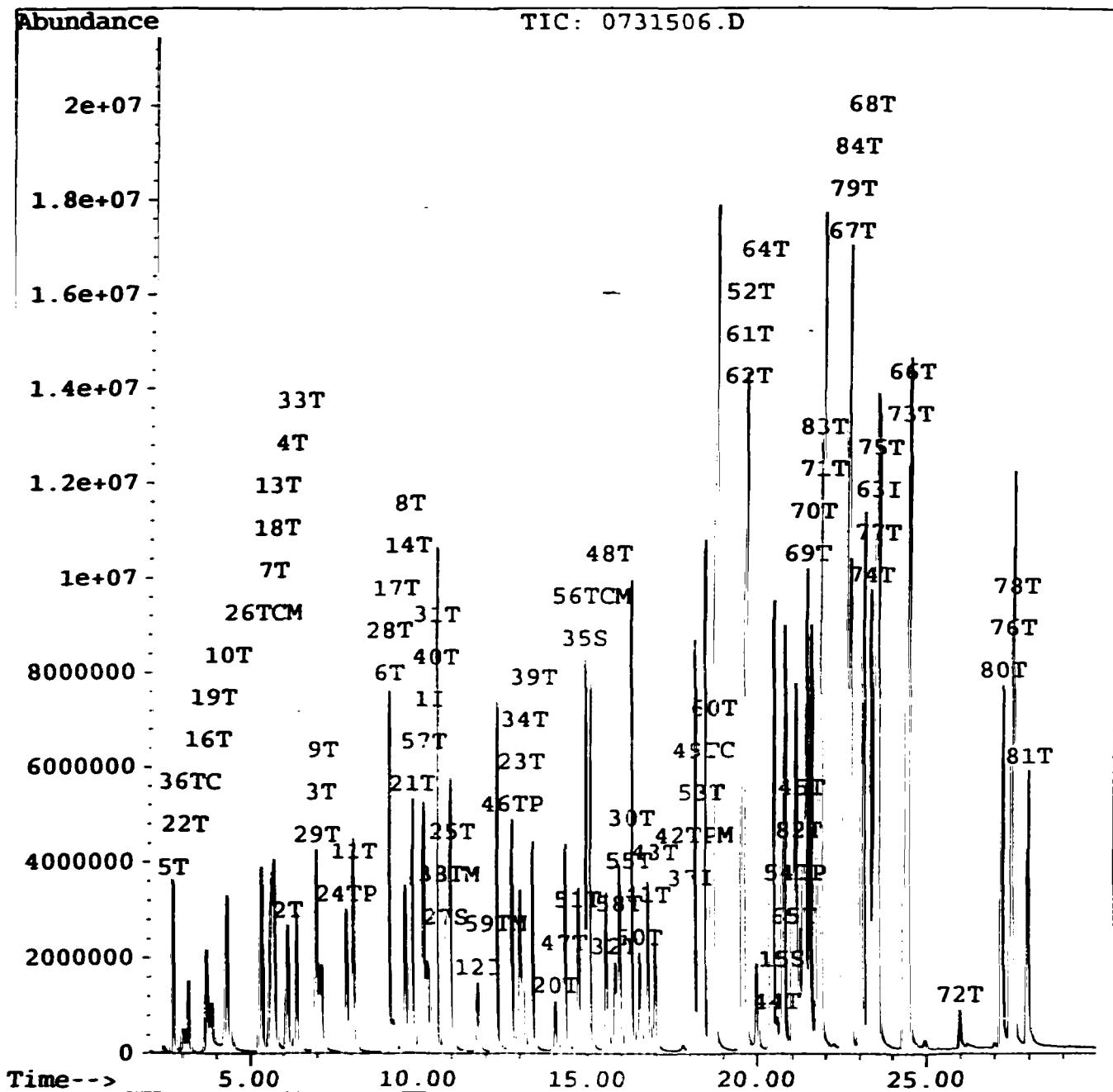
Page 2

Quantitation Report

**Data File :** c:\hpchem\1\data\9707315.b\0731506.d  
**Acq On :** 31 Jul 97 12:43 pm  
**Sample :** VSTD025 IEA MSD5  
**Misc :** WATER LOW 1X  
**Quant Time:** Jul 31 13:43 1997

**Vial:** 1  
**Operator:** MOORE  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** C:\HPCHEM\1\DATA\9707315.B\M691.M  
**Title :** 6/91 IEA MSD5  
**Last Update :** Thu Jul 31 14:06:02 1997  
**Response via :** Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9707315.b\0731506.d  
 Acq On : 31 Jul 97 12:43 pm  
 Sample : VSTD025 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:43 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.26	168	3514701	5.00	µg/L	0.05
12) 1,4-Difluorobenzene	11.76	114	3708816	5.00	µg/L	0.06
37) Chlorobenzene-d5	18.02	117	2958835	5.00	µg/L	0.03
63) 1,4-Dichlorobenzene-d4	23.43	152	1641442	5.00	µg/L	0.04

System Monitoring Compounds				%Recovery
15) 4-Bromofluorobenzene	20.73	95	10506447	22.66 µg/L 453.26%
27) 1,2-Dichloroethane-d4	10.80	102	1125931	23.17 µg/L 463.42%
35) Toluene-d8	14.86	98	17049441	23.78 µg/L 475.60%

Target Compounds				Qvalue
2) Acetonitrile	6.11	41	4749418	16.47 µg/L 100
3) Acrylonitrile	7.04	53	303388	19.18 µg/L # 100
4) Allyl chloride	6.11	76	2086733	24.03 µg/L # 63
5) Dichlorodifluoromethane	2.70	85	8215479	33.91 µg/L 96
6) 2,2-Dichloropropane	9.07	77	9736688	25.47 µg/L 98
7) Iodomethane	5.61	142	13751701	27.12 µg/L 100
8) Methacrylonitrile	9.63	41	622980	16.19 µg/L # 67
9) Methyl-tert-Butyl ether	7.10	73	6092751	23.82 µg/L 92
10) Trichlorofluoromethane	4.29	101	8005637	18.25 µg/L 99
11) Vinyl acetate	8.07	43	4106457	20.44 µg/L # 92
13) Acetone	5.71	43	1258650	80.84 µg/L 99
14) Bromochloromethane	9.58	128	2898645	24.32 µg/L # 81
16) Bromomethane	3.69	94	4139685	27.33 µg/L 99
17) 2-Butanone	9.25	43	2257406	84.74 µg/L # 84
18) Carbon disulfide	5.71	76	12721688	31.14 µg/L 99
19) Chloroethane	3.85	64	1649404	19.74 µg/L 100
20) 2-Chloroethyl vinyl ether	14.04	63	1466194	24.63 µg/L # 84
21) Chloroform	9.79	83	12349168	24.33 µg/L 98
22) Chloromethane	3.03	50	2044186	15.88 µg/L 97
23) Dibromomethane	12.99	93	3908476	20.19 µg/L 100
24) 1,1-Dichloroethane	7.84	63	8775049	21.15 µg/L 98
25) 1,2-Dichloroethane	10.96	62	5622910	19.63 µg/L 100
26) 1,1-Dichloroethene	5.31	96	4555563	25.27 µg/L 99
28) cis-1,2-Dichloroethene	9.08	96	5228650	21.47 µg/L 99
29) trans-1,2-Dichloroethene	6.95	96	4979306	25.03 µg/L 97
30) 1,3-Dichloropropane	16.26	76	5082181	21.28 µg/L 89
31) 1,1-Dichloropropene	10.46	75	8169292	22.79 µg/L 98
32) Ethyl methacrylate	15.78	69	3302058	23.07 µg/L # 89
33) Methylene chloride	6.38	84	4071096	22.23 µg/L 86
34) Methyl methacrylate	13.09	69	1332654	23.55 µg/L 85
36) Vinyl chloride	3.17	62	3285070	21.62 µg/L 99
38) Benzene	10.89	78	13433534	22.95 µg/L 100
39) Bromodichloromethane	13.35	83	8438122	19.79 µg/L 100

(#) = qualifier out of range (m) = manual integration

0731506.d M691.M Thu Jul 31 14:17:35 1997 MSD5

Page 1

Data File : c:\hpchem\1\data\9707315.b\0731506.d  
 Acq On : 31 Jul 97 12:43 pm  
 Sample : VSTD025 IEA MSDS  
 Misc : WATER LOW 1X  
 Quant Time: Jul 31 13:43 1997

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970.315.B\M691.M  
 Title : 6/91 IEA MSDS  
 Last Update : Thu Jul 31 14:06:02 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.46	117	10971500	22.88	µg/L	100
41) Chlorodibromomethane	16.75	129	5353207	19.06	µg/L	# 88
42) Chlorobenzene	18.09	112	13774436	25.52	µg/L	99
43) 1,2-Dibromoethane	16.98	107	5115836	22.01	µg/L	S, h, 98
44) cis-1,4-Dichloro-2-butene	20.57	75	440480	17.77	µg/L	m 69
45) trans-1,4-Dichloro-2-buten	21.25	53	527408	11.61	µg/L	# 1
46) 1,2-Dichloropropane	12.74	63	5138564	20.80	µg/L	# 95
47) cis-1,3-Dichloropropene	14.30	75	7621513	26.37	µg/L	100
48) trans-1,3-Dichloropropene	15.52	75	5714751	27.82	µg/L	100
49) Ethylbenzene	18.37	91	21482418	24.82	µg/L	
50) 2-Hexanone	16.52	43	4729313	92.80	µg/L	#
51) 4-Methyl-2-pentanone	14.69	43	7467443	83.71	µg/L	# 85
52) Styrene	19.57	104	12433309	27.73	µg/L	98
53) 1,1,1,2-Tetrachloroethane	18.29	131	6855936	22.59	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.10	83	4128660	22.70	µg/L	99
55) Tetrachloroethene	16.19	164	7019566	24.11	µg/L	97
56) Toluene	15.01	91	17192795	19.20	µg/L	98
57) 1,1,1-Trichloroethane	10.11	97	11583863	23.67	µg/L	# 78
58) 1,1,2-Trichloroethane	15.90	97	3492784	24.11	µg/L	98
59) Trichloroethene	12.28	95	7622502	24.89	µg/L	99
60) m,p-Xylene	18.64	106	15888419	50.68	µg/L	91
61) o-Xylene	19.53	106	7606654	25.46	µg/L	92
62) Xylene (total)	19.53	106	7606654	25.46	µg/L	93
64) Bromoform	19.97	173	2485531	17.47	µg/L	# 99
65) Bromobenzene	21.05	156	6547967	23.69	µg/L	95
66) n-Butylbenzene	24.38	91	20038392	27.45	µg/L	99
67) tert-Butylbenzene	22.53	119	22718371	24.61	µg/L	
68) sec-Butylbenzene	23.05	105	26900721	26.36	µg/L	98
69) n-Propylbenzene	21.35	91	25859582	25.97	µg/L	98
70) 2-Chlorotoluene	21.51	91	17189523	23.91	µg/L	99
71) 4-Chlorotoluene	21.77	91	19541381	24.29	µg/L	99
72) 1,2-Dibromo-3-chloropropan	25.96	75	576841	19.02	µg/L	95
73) 1,2-Dichlorobenzene	24.34	146	9931453	24.37	µg/L	98
74) 1,3-Dichlorobenzene	23.27	146	12267899	25.55	µg/L	98
75) 1,4-Dichlorobenzene	23.48	146	12538997	24.22	µg/L	97
76) Hexachlorobutadiene	27.46	225	6353873	21.31	µg/L	100
77) p-Isopropyltoluene	23.42	119	20624495	25.64	µg/L	97
78) Naphthalene	27.54	128	4905065	29.06	µg/L	100
79) Pentachloroethane	22.54	167	4325087	22.66	µg/L	# 91
80) 1,2,4-Trichlorobenzene	27.17	180	6284320	23.26	µg/L	97
81) 1,2,3-Trichlorobenzene	27.94	180	4886407	24.40	µg/L	98
82) 1,2,3-Trichloropropane	21.18	75	3396929	21.56	µg/L	# 24
83) 1,3,5-Trimethylbenzene	21.78	105	17847203	25.44	µg/L	97
84) 1,2,4-Trimethylbenzene	22.65	105	18595875	25.71	µg/L	96

(#) = qualifier out of range (m) = manual integration

0731506.d M691.M Thu Jul 31 14:17:38 1997 MSD5

Page 2

6LCA  
LOW CONC. WATER VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD5      Calibration Date(s): 08/28/97 08/28/97  
Heated Purge: (Y/N) N      Calibration Times: 20:56 23:22

GC Column: DB-624      ID: .53 (mm)  
Min RRF for SPCC(#) = .300,.100      Max %RSD for CCC(\*) = 30.0%  
Min RRF for Bromoform = 0.250

LAB FILE ID:	RRF01 = 0828E01M.D	RRF02 = 0828E02M.D
	RRF05 = 0828E03M.D	RRF010= 0828E04M.D      RRF025= 0828E05M.D

COMPOUND	RRF01	RRF02	RRF05	RRF010	RRF025	RRF	% RSD
Acetone	0.023	0.024	0.020	0.021	0.020	0.021	8.3
Benzene	* 1.180	1.160	1.101	1.069	1.053	1.107	4.7 *
Bromochloromethane	* 0.198	0.194	0.183	0.191	0.182	0.188	4.0 *
Bromodichloromethane	* 0.903	0.890	0.859	0.844	0.837	0.864	3.0 *
Bromoform	* 0.495	0.474	0.421	0.459	0.472	0.469	5.8 *
Bromomethane	* 0.264	0.264	0.255	0.266	0.260	0.264	2.2 *
2-Butanone	0.031	0.038	0.034	0.038	0.038	0.036	8.7
Carbon Disulfide	0.895	0.873	0.827	0.816	0.819	0.839	4.4
Carbon Tetrachloride	* 0.970	0.967	0.893	0.870	0.873	0.910	5.0 *
Chlorobenzene	* 1.107	1.073	1.032	1.023	1.008	1.043	3.7 *
Chloroethane	0.178	0.165	0.114	0.106	0.102	0.128	27.1
Chloroform	* 0.810	0.836	0.769	0.769	0.777	0.789	3.5 *
Chloromethane	0.230	0.216	0.202	0.190	0.184	0.201	9.6
Dibromochloromethane	* 0.572	0.560	0.531	0.546	0.538	0.551	2.8 *
1,2-Dibromo-3-Chloropropane	0.135	0.135	0.120	0.135	0.124	0.130	5.0
1,2-Dibromoethane	* 0.406	0.432	0.409	0.422	0.409	0.416	2.4 *
1,2-Dichlorobenzene	* 1.492	1.395	1.343	1.393	1.338	1.384	4.3 *
1,3-Dichlorobenzene	* 1.728	1.698	1.573	1.594	1.595	1.633	3.9 *
1,4-Dichlorobenzene	* 1.900	1.869	1.719	1.680	1.640	1.747	6.3 *
1,1-Dichloroethane	* 0.632	0.642	0.609	0.585	0.595	0.610	3.7 *
1,2-Dichloroethane	* 0.392	0.392	0.383	0.392	0.379	0.386	1.8 *
1,1-Dichloroethene	* 0.312	0.315	0.285	0.280	0.277	0.292	5.8 *
Cis-1,2-Dichloroethene	0.359	0.354	0.342	0.335	0.327	0.341	3.9
Trans-1,2-Dichloroethene	0.326	0.328	0.306	0.302	0.297	0.309	4.5
1,2-Dichloropropane	0.468	0.494	0.468	0.455	0.456	0.467	3.1
Cis-1,3-Dichloropropene	* 0.634	0.631	0.621	0.621	0.605	0.621	1.7 *
Trans-1,3-Dichloropropene	* 0.456	0.473	0.477	0.474	0.472	0.471	1.6 *
Ethylbenzene	* 1.736	1.723	1.672	1.652	1.636	1.678	2.5 *
2-Hexanone	0.088	0.081	0.079	0.100	0.094	0.090	10.0
Methylene Chloride	0.305	0.284	0.269	0.264	0.255	0.272	7.2
4-Methyl-2-Pentanone	0.140	0.156	0.156	0.161	0.156	0.155	4.7
Styrene	* 0.941	0.967	0.970	0.954	0.924	0.949	1.8 *
1,1,2,2-Tetrachloroethane	* 0.405	0.380	0.350	0.364	0.339	0.364	6.8 *
Tetrachloroethene	* 0.522	0.520	0.508	0.484	0.487	0.503	3.2 *
Toluene	* 1.383	1.367	1.345	1.316	1.292	1.336	2.6 *
1,1,1-Trichloroethane	* 0.972	1.003	0.911	0.898	0.903	0.935	4.6 *
1,1,2-Trichloroethane	* 0.294	0.303	0.297	0.289	0.282	0.293	2.4 *
Trichloroethene	* 0.622	0.644	0.605	0.580	0.586	0.606	3.9 *

\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

6LCA  
LOW CONC. WATER VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD5      Calibration Date(s): 08/28/97 08/28/97  
Heated Purge: (Y/N) N      Calibration Times: 20:56 23:22

GC Column: DB-624      ID: .53 (mm)

Min RRF for SPCC(#) = .300,.100      Max %RSD for CCC(\*) = 30.0%  
Min RRF for Bromoform = 0.250

<b>LAB FILE ID:</b>	RRF01 = 0828E01M.D	RRF02 = 0828E02M.D
	RRF05 = 0828E03M.D	RRF010= 0828E04M.D
		RRF025= 0828E05M.D

COMPOUND	RRF01	RRF02	RRF05	RRF010	RRF025	<u>RRF</u>	% RSD
Vinyl Chloride	* 0.247	0.254	0.231	0.234	0.237	0.239	3.8 *
Xylene (Total)	* 0.578	0.597	0.578	0.571	0.564	0.576	2.0 *
4-Bromofluorobenzene	* 0.610	0.614	0.612	0.619	0.580	0.601	3 -

\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

## Response Factor Report MSD5

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:25:54 1997  
 Response via : Initial Calibration

## Calibration Files

1	=0828E01M.D	2	=0828E02M.D	5	=0828E03M.D
10	=0828E04M.D	25	=0828E06M.D	20	=0828E05M.D

(Mg) 247

	Compound	1	2	5	10	25	20	Avg	%RSD
<hr/>									
1)	I Pentafluorobenzene			-----ISTD-----					
2)	T Acetonitrile	0.513	0.507	0.454	0.457	0.445	0.440	0.469	6.78
3)	T Acrylonitrile	0.018	0.033	0.029	0.029	0.027	0.026	0.027	17.67
4)	T Allyl chloride	0.167	0.169	0.156	0.157	0.153	0.153	0.159	4.39
5)	T Dichlorodifluoromethane	0.666	0.686	0.666	0.652	0.654	0.648	0.662	2.11
6)	T 2,2-Dichloropropane	0.734	0.766	0.712	0.709	0.701	0.685	0.718	4.00
7)	T Iodomethane	0.856	0.898	0.879	0.898	0.899	0.906	0.889	2.09
8)	T Methacrylonitrile	0.107	0.058	0.063	0.068	0.069	0.066	0.072	24.58
9)	T Methyl-tert-Butyl ether	0.499	0.523	0.474	0.487	0.462	0.455	0.483	5.21
10)	T Trichlorofluoromethane	0.693	0.717	0.689	0.663	0.508	0.514	0.631	14.94
11)	T Vinyl acetate	0.451	0.399	0.382	0.391	0.385	0.364	0.396	7.49
<hr/>									
12)	I 1,4-Difluorobenzene			-----ISTD-----					
13)	T Acetone	0.023	0.024	0.020	0.021	0.020	0.020	0.021	8.28
14)	T Bromochloromethane	0.198	0.194	0.183	0.191	0.180	0.182	0.188	4.02
15)	S 4-Bromofluorobenzene	0.610	0.614	0.612	0.619	0.569	0.580	0.601	3.45
16)	T Bromomethane	0.264	0.264	0.255	0.266	0.273	0.260	0.264	2.22
17)	T 2-Butanone	0.031	0.038	0.034	0.038	0.039	0.038	0.036	8.73
18)	T Carbon disulfide	0.895	0.873	0.827	0.816	0.801	0.819	0.839	4.39
19)	T Chloroethane	0.178	0.165	0.114	0.106	0.101	0.102	0.128	27.06
20)	T 2-Chloroethyl vinyl ether	0.083	0.088	0.104	0.106	0.108	0.105	0.099	10.83
21)	T Chloroform	0.810	0.836	0.769	0.769	0.774	0.777	0.789	3.51
22)	T Chloromethane	0.230	0.216	0.202	0.190	0.181	0.184	0.201	9.62
23)	T Dibromomethane	0.279	0.272	0.267	0.272	0.265	0.263	0.270	2.16
24)	TP 1,1-Dichloroethane	0.632	0.642	0.609	0.585	0.599	0.595	0.610	3.66
25)	T 1,2-Dichloroethane	0.392	0.392	0.383	0.392	0.378	0.379	0.386	1.75
26)	TCM 1,1-Dichloroethene	0.312	0.315	0.285	0.280	0.283	0.277	0.292	5.77
27)	S 1,2-Dichloroethane	0.055	0.060	0.064	0.067	0.063	0.064	0.062	6.82
28)	T cis-1,2-Dichloroethane	0.359	0.354	0.342	0.335	0.328	0.327	0.341	3.91
29)	T trans-1,2-Dichloroethane	0.326	0.328	0.306	0.302	0.298	0.297	0.309	4.51
30)	T 1,3-Dichloropropane	0.367	0.352	0.344	0.351	0.334	0.331	0.346	3.83
31)	T 1,1-Dichloropropene	0.572	0.574	0.541	0.525	0.520	0.518	0.541	4.74
32)	T Ethyl methacrylate	0.251	0.227	0.230	0.232	0.223	0.224	0.231	4.58
33)	T Methylene chloride	0.305	0.284	0.269	0.264	0.253	0.255	0.272	7.22
34)	T Methyl methacrylate	0.110	0.096	0.091	0.095	0.094	0.093	0.096	7.07
35)	S Toluene-d8	0.967	0.958	0.996	0.992	0.928	0.946	0.965	2.71
36)	TC Vinyl chloride	0.247	0.254	0.231	0.234	0.232	0.237	0.239	3.82
<hr/>									
37)	I Chlorobenzene-d5			-----ISTD-----					
38)	TM Benzene	1.180	1.160	1.101	1.069	1.079	1.053	1.107	4.67
39)	T Bromodichloromethane	0.903	0.890	0.859	0.844	0.854	0.837	0.864	3.03
40)	T Carbon tetrachloride	0.970	0.967	0.893	0.870	0.889	0.873	0.910	5.05
41)	T Chlorodibromomethane	0.572	0.560	0.531	0.546	0.555	0.538	0.551	2.77
42)	TPM Chlorobenzene	1.107	1.073	1.032	1.023	1.016	1.008	1.043	3.71
43)	T 1,2-Dibromoethane	0.406	0.432	0.409	0.422	0.417	0.409	0.416	2.42
44)	T cis-1,4-Dichloro-2-	0.043	0.063	0.066	0.083	0.080	0.078	0.069	21.66
45)	T trans-1,4-Dichloro-	0.106	0.110	0.110	0.103	0.103	0.102	0.106	3.15
46)	TP 1,2-Dichloropropane	0.468	0.494	0.468	0.455	0.460	0.456	0.467	3.11
47)	T cis-1,3-Dichloropropane	0.634	0.631	0.621	0.621	0.615	0.605	0.621	1.68

48)	T	trans-1,3-Dichloropropene	0.456	0.473	0.477	0.474	0.475	0.472	0.471	1.6
49)	TC	Ethylbenzene	1.736	1.723	1.672	1.652	1.647	1.636	1.678	2.5
50)	T	2-Hexanone	0.088	0.081	0.079	0.100	0.100	0.094	0.090	9.9
51)	T	4-Methyl-2-pentanone	0.140	0.156	0.156	0.161	0.158	0.156	0.155	4.7
52)	T	Styrene	0.941	0.967	0.970	0.954	0.941	0.924	0.949	1.8
53)	T	1,1,1,2-Tetrachloroethane	0.570	0.550	0.530	0.539	0.534	0.525	0.541	3.0
54)	TP	1,1,2,2-Tetrachloroethane	0.405	0.380	0.350	0.364	0.346	0.339	0.364	6.8
55)	T	Tetrachloroethylene	0.522	0.520	0.508	0.484	0.499	0.487	0.503	3.2
56)	TCM	Toluene	1.383	1.367	1.345	1.316	1.313	1.292	1.336	2.6
57)	T	1,1,1-Trichloroethane	0.972	1.003	0.911	0.898	0.925	0.903	0.935	4.5
58)	T	1,1,2-Trichloroethane	0.294	0.303	0.297	0.289	0.294	0.282	0.293	2.3
59)	TM	Trichloroethylene	0.622	0.644	0.605	0.580	0.598	0.586	0.606	3.9
60)	T	m,p-Xylene	0.630	0.624	0.607	0.595	0.587	0.586	0.605	3.1
61)	T	o-Xylene	0.578	0.597	0.578	0.571	0.567	0.564	0.576	2.0
62)	T	Xylene (total)	0.578	0.597	0.578	0.571	0.567	0.564	0.576	2.0
63)	I	1,4-Dichlorobenzene-d	-----	-----	-----	-----	ISTD-----	-----	-----	-----
64)	T	Bromoform	0.495	0.474	0.421	0.459	0.493	0.472	0.469	5.7
65)	T	Bromobenzene	1.018	0.965	0.886	0.908	0.925	0.914	0.936	5.1
66)	T	n-Butylbenzene	2.792	3.047	2.792	2.859	2.977	2.946	2.902	3.5
67)	T	tert-Butylbenzene	3.782	3.566	3.239	3.230	3.184	3.216	3.370	7.3
68)	T	sec-Butylbenzene	4.324	4.231	3.892	3.901	3.856	3.867	4.012	5.2
69)	T	n-Propylbenzene	4.124	3.985	3.707	3.814	3.887	3.867	3.897	3.6
70)	T	2-Chlorotoluene	3.223	2.918	2.604	2.520	2.519	2.580	2.727	3.4
71)	T	4-Chlorotoluene	3.427	3.185	2.908	2.900	2.874	2.896	3.032	3.4
72)	T	1,2-Dibromo-3-chloro	0.135	0.135	0.120	0.135	0.132	0.124	0.130	4.9
73)	T	1,2-Dichlorobenzene	1.492	1.395	1.343	1.393	1.343	1.338	1.384	4.2
74)	T	1,3-Dichlorobenzene	1.728	1.698	1.573	1.594	1.612	1.595	1.633	3.8
75)	T	1,4-Dichlorobenzene	1.900	1.869	1.719	1.680	1.672	1.640	1.747	6.3
76)	T	Hexachlorobutadiene	0.970	0.958	0.879	0.884	0.903	0.891	0.914	4.3
77)	T	p-Isopropyltoluene	3.094	3.089	2.845	2.844	2.913	2.890	2.946	3.9
78)	T	Naphthalene	0.389	0.527	0.545	0.614	0.711	0.667	0.576	20.0
9)	T	Pentachloroethane	0.676	0.672	0.596	0.612	0.600	0.601	0.626	5.9
80)	T	1,2,4-Trichlorobenzene	0.726	0.768	0.757	0.839	0.898	0.878	0.811	8.6
81)	T	1,2,3-Trichlorobenzene	0.570	0.644	0.622	0.668	0.715	0.694	0.652	8.0
82)	T	1,2,3-Trichloropropene	0.574	0.573	0.522	0.554	0.549	0.547	0.553	3.4
83)	T	1,3,5-Trimethylbenzene	3.139	2.918	2.627	2.575	2.580	2.600	2.740	8.5
84)	T	1,2,4-Trimethylbenzene	2.948	2.842	2.629	2.589	2.676	2.667	2.725	5.1

(#) = Out of Range

M691.M

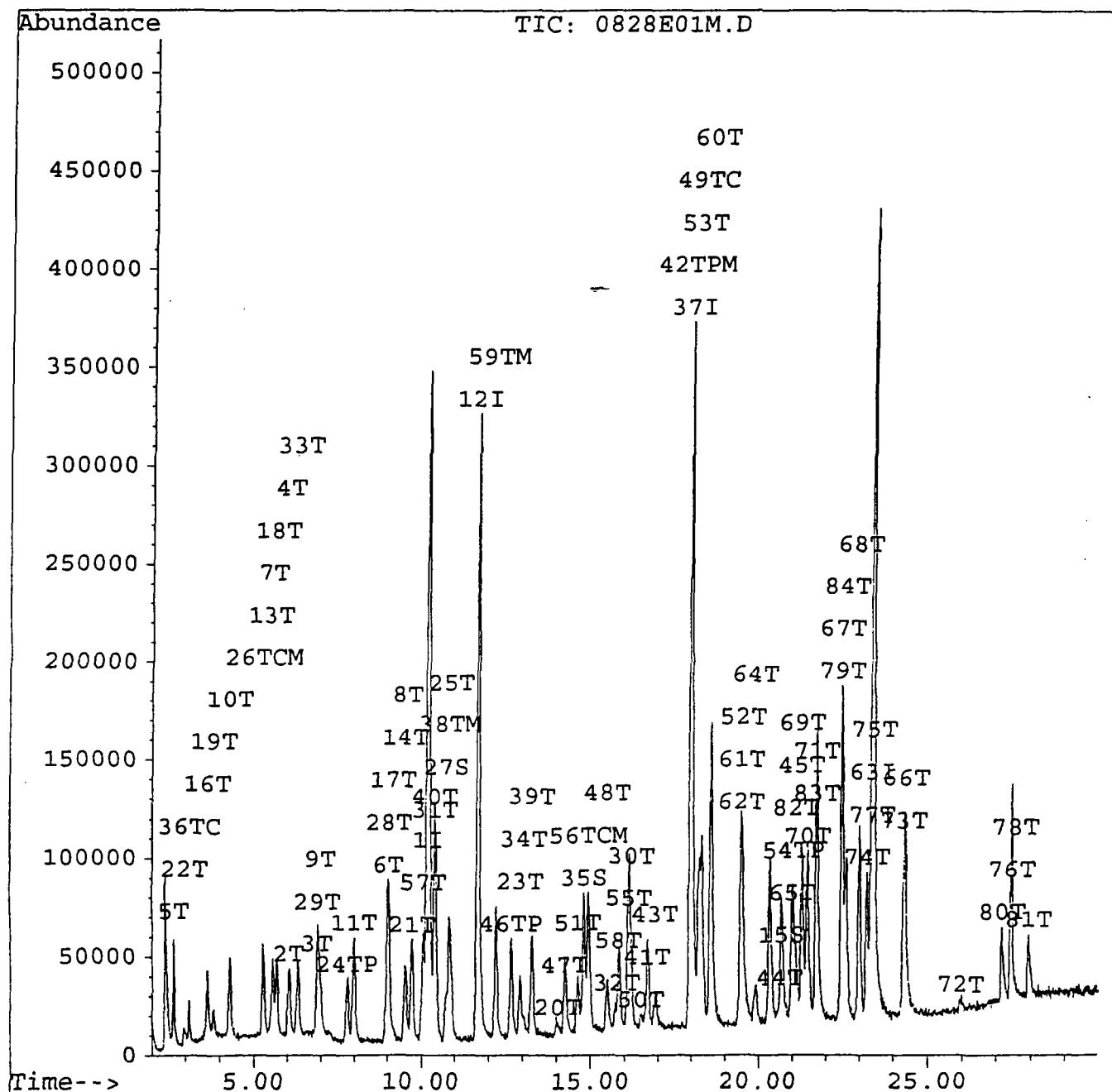
Fri Aug 29 07:33:40 1997 MSD5

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e01m.d  
 Acq On : 28 Aug 97 8:56 pm  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:00 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e01m.d  
 Acq On : 28 Aug 97 8:56 pm  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:00 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.19	168	686051	5.00	µg/L	0.00
12) 1,4-Difluorobenzene	11.69	114	751174	5.00	µg/L	0.00
37) Chlorobenzene-d5	17.96	117	580129	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.36	152	276963	5.00	µg/L	0.00
<b>System Monitoring Compounds</b>						% Recovery
15) 4-Bromofluorobenzene	20.69	95	91572	1.04	µg/L	20.72%
27) 1,2-Dichloroethane-d4	10.75	102	8197	0.89	µg/L#	17.88%
35) Toluene-d8	14.81	98	145323	1.06	µg/L	2.12%
<b>Target Compounds</b>						Qvalue -
2) Acetonitrile	6.06	41	70373	1.88	µg/L	100
3) Acrylonitrile	6.87	53	2521	0.97	µg/L m	24
4) Allyl chloride	6.08	76	22954	1.31	µg/L <i>Manh.</i>	73
5) Dichlorodifluoromethane	2.67	85	91440	1.30	µg/L	99
6) 2,2-Dichloropropane	9.00	77	100711	1.22	µg/L	99
7) Iodomethane	5.58	142	117457	1.08	µg/L	97
8) Methacrylonitrile	9.60	41	14719	2.14	µg/L #	34
9) Methyl-tert-Butyl ether	6.99	73	68506	1.28	µg/L #	84
10) Trichlorofluoromethane	4.31	101	95025	1.13	µg/L	99
11) Vinyl acetate	7.99	43	61922	1.68	µg/L #	86
13) Acetone	5.49	43	16933	6.78	µg/L #	51
14) Bromochloromethane	9.52	128	29794	1.17	µg/L	84
16) Bromomethane	3.65	94	39712	1.15	µg/L	95
17) 2-Butanone	9.16	43	22915	5.82	µg/L #	69
18) Carbon disulfide	5.70	76	134469	1.24	µg/L	
19) Chloroethane	3.84	64	26696	1.57	µg/L	94
20) 2-Chloroethyl vinyl ether	14.05	63	12477	1.08	µg/L #	45
21) Chloroform	9.72	83	121650	1.15	µg/L	99
22) Chloromethane	2.97	50	34506	1.68	µg/L	96
23) Dibromomethane	12.93	93	41937	1.21	µg/L	95
24) 1,1-Dichloroethane	7.79	63	94882	1.25	µg/L	99
25) 1,2-Dichloroethane	10.90	62	58843	1.18	µg/L #	85
26) 1,1-Dichloroethene	5.30	96	46929	1.19	µg/L	98
28) cis-1,2-Dichloroethene	9.03	96	53950	1.19	µg/L	96
29) trans-1,2-Dichloroethene	6.90	96	48986	1.17	µg/L	93
30) 1,3-Dichloropropane	16.20	76	55129	1.24	µg/L #	88
31) 1,1-Dichloropropene	10.42	75	85957	1.22	µg/L	97
32) Ethyl methacrylate	15.78	69	37775	1.35	µg/L m	93
33) Methylene chloride	6.33	84	45762	1.29	µg/L	91
34) Methyl methacrylate	13.04	69	16480	1.49	µg/L m	76
36) Vinyl chloride	3.12	62	37123	1.30	µg/L	96
38) Benzene	10.84	78	136901	1.26	µg/L	100
39) Bromodichloromethane	13.28	83	104741	1.46	µg/L #	99

(#) = qualifier out of range (m) = manual integration  
 0828e01m.d M691.M Fri Aug 29 07:52:40 1997

MSD5

Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e01m.d  
 Acq On : 28 Aug 97 8:56 pm  
 Sample : VSTD001 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:00 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.40	117	112518	1.22	µg/L	95
41) Chlorodibromomethane	16.68	129	66414	1.51	µg/L #	95
42) Chlorobenzene	18.03	112	128481	1.15	µg/L	92
43) 1,2-Dibromoethane	16.91	107	47105	1.12	µg/L #	91
44) cis-1,4-Dichloro-2-butene	20.62	75	2485	0.45	µg/L m	60
45) trans-1,4-Dichloro-2-butene	21.25	53	6127	0.74	µg/L m	83
46) 1,2-Dichloropropane	12.66	63	54252	1.27	µg/L #	83
47) cis-1,3-Dichloropropene	14.25	75	73540	1.19	µg/L	99
48) trans-1,3-Dichloropropene	15.48	75	52941	1.14	µg/L m	93
49) Ethylbenzene	18.32	91	201449	1.16	µg/L	98
50) 2-Hexanone	16.50	43	50896	7.14	µg/L m	45
51) 4-Methyl-2-pentanone	14.62	43	81479	6.39	µg/L #	92
52) Styrene	19.53	104	109208	1.09	µg/L	95
53) 1,1,1,2-Tetrachloroethane	18.22	131	66119	1.17	µg/L	96
54) 1,1,2,2-Tetrachloroethane	21.05	83	46976	1.31	µg/L #	98
55) Tetrachloroethene	16.13	164	60571	1.07	µg/L	99
56) Toluene	14.95	91	160451	1.17	µg/L	97
57) 1,1,1-Trichloroethane	10.06	97	112776	1.16	µg/L	95
58) 1,1,2-Trichloroethane	15.83	97	34068	1.17	µg/L #	96
59) Trichloroethene	12.21	95	72189	1.16	µg/L	97
60) m,p-Xylene	18.58	106	146165	2.27	µg/L	99
61) o-Xylene	19.47	106	67017	1.09	µg/L	87
62) Xylene (total)	19.47	106	67017	1.09	µg/L	87
64) Bromoform	19.90	173	27427	1.55	µg/L #	87
65) Bromobenzene	21.00	156	56392	1.21	µg/L	85
66) n-Butylbenzene	24.35	91	154660	1.15	µg/L	96
67) tert-Butylbenzene	22.47	119	209490	1.27	µg/L	97
68) sec-Butylbenzene	22.99	105	239522	1.26	µg/L	98
69) n-Propylbenzene	21.29	91	228417	1.27	µg/L	98
70) 2-Chlorotoluene	21.44	91	178533	1.40	µg/L	92
71) 4-Chlorotoluene	21.72	91	189831	1.31	µg/L	94
72) 1,2-Dibromo-3-chloropropan	25.96	75	7491	1.68	µg/L #	69
73) 1,2-Dichlorobenzene	24.30	146	82670	1.16	µg/L	98
74) 1,3-Dichlorobenzene	23.22	146	95694	1.13	µg/L	99
75) 1,4-Dichlorobenzene	23.43	146	105270	1.18	µg/L	96
76) Hexachlorobutadiene	27.43	225	53704	1.17	µg/L	98
77) p-Isopropyltoluene	23.36	119	171371	1.20	µg/L	95
78) Naphthalene	27.55	128	21536	0.78	µg/L	100
79) Pentachloroethane	22.47	167	37443	1.22	µg/L	93
80) 1,2,4-Trichlorobenzene	27.18	180	40227	1.00	µg/L	97
81) 1,2,3-Trichlorobenzene	27.93	180	31568	0.99	µg/L	96
82) 1,2,3-Trichloropropane	21.12	75	31790	1.28	µg/L #	27
83) 1,3,5-Trimethylbenzene	21.72	105	173888	1.34	µg/L	95
84) 1,2,4-Trimethylbenzene	22.58	105	163320	1.25	µg/L	97

(#) = qualifier out of range (m) = manual integration

0828e01m.d M691.M

Fri Aug 29 07:52:43 1997

MSD5

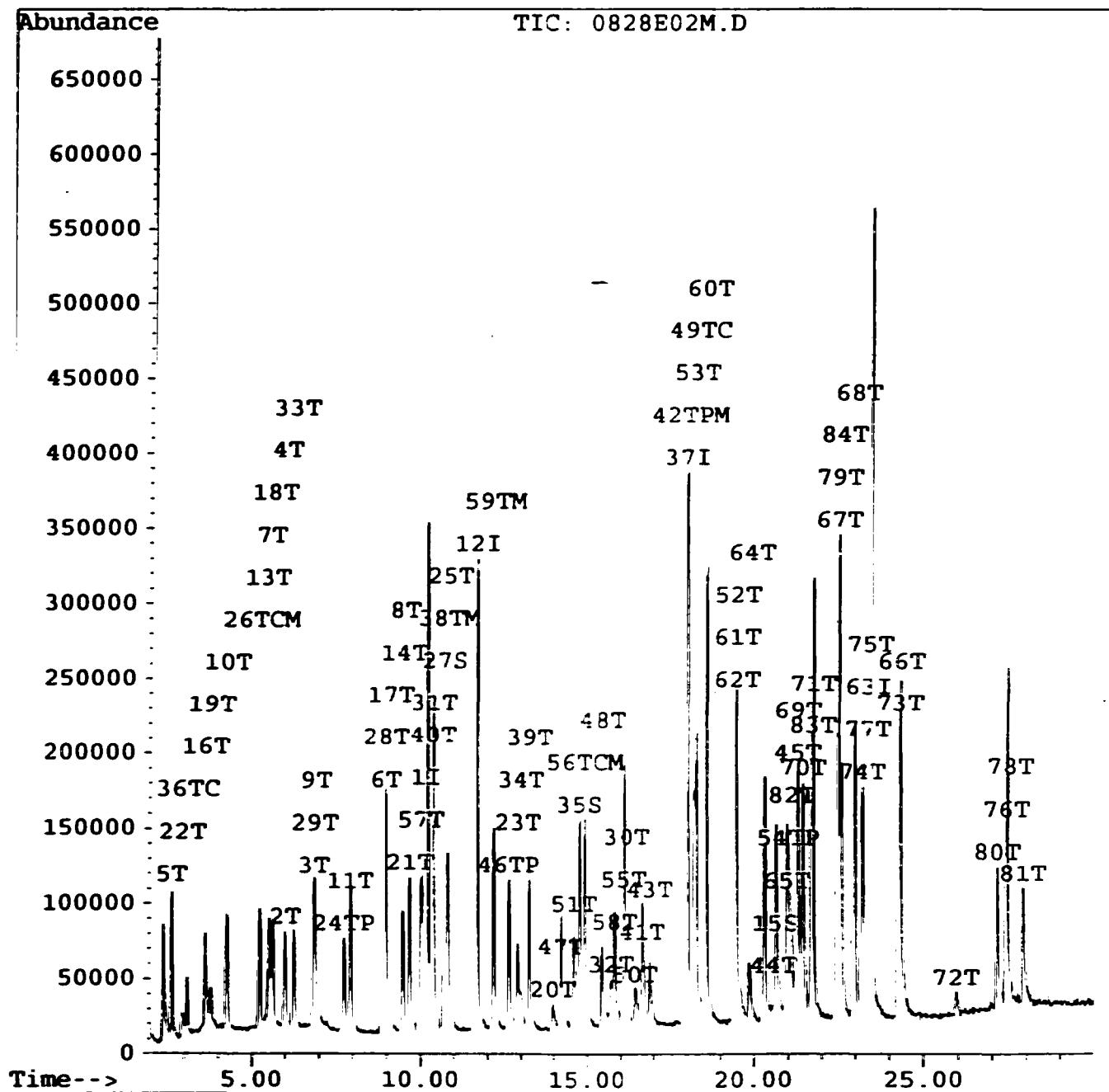
Page\_2

## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e02m.d  
Acq On : 28 Aug 97 9:33 pm  
Sample : VSTD002 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 29 7:08 1997

Vial: 16  
Operator: CREWES  
Inst : MSD5  
Dilution: 1.00

**Method** : C:\HPCHEM\1\DATA\970828E.B\M691.M  
**Title** : 6/91 IEA MSD5  
**Last Update** : Fri Aug 29 07:41:06 1997  
**Response via** : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e02m.d  
 Acq On : 28 Aug 97 9:33 pm  
 Sample : VSTD002 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:08 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.14	168	646051	5.00	µg/L	-0.05
12) 1,4-Difluorobenzene	11.65	114	727876	5.00	µg/L	-0.04
37) Chlorobenzene-d5	17.92	117	551669	5.00	µg/L	-0.04
63) 1,4-Dichlorobenzene-d4	23.34	152	277986	5.00	µg/L	-0.03
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.63	95	178636	2.09	µg/L	41.72%
27) 1,2-Dichloroethane-d4	10.67	102	17428	1.96	µg/L	39.22%
35) Toluene-d8	14.76	98	278892	2.09	µg/L	41.83%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	6.01	41	130939	3.72	µg/L	100
3) Acrylonitrile	6.83	53	8406	3.37	µg/L m	100
4) Allyl chloride	6.01	76	43590	2.63	µg/L <i>shsh</i>	93
5) Dichlorodifluoromethane	2.64	85	177265	2.67	µg/L	100
6) 2,2-Dichloropropane	8.94	77	197980	2.55	µg/L	100
7) Iodomethane	5.53	142	231971	2.26	µg/L	98
8) Methacrylonitrile	9.50	41	15109	2.33	µg/L #	100
9) Methyl-tert-Butyl ether	6.91	73	135107	2.69	µg/L #	75
10) Trichlorofluoromethane	4.26	101	185327	2.35	µg/L	100
11) Vinyl acetate	7.92	43	103223	2.95	µg/L #	89
13) Acetone	5.43	43	35382	15.01	µg/L #	60
14) Bromochloromethane	9.45	128	56596	2.30	µg/L	97
16) Bromomethane	3.61	94	76936	2.29	µg/L	99
17) 2-Butanone	9.08	43	54845	14.37	µg/L #	57
18) Carbon disulfide	5.64	76	254101	2.42	µg/L	99
19) Chloroethane	3.79	64	48122	2.92	µg/L m	100
20) 2-Chloroethyl vinyl ether	13.96	63	25613	2.28	µg/L #	100
21) Chloroform	9.67	83	243494	2.38	µg/L	99
22) Chloromethane	2.96	50	63024	3.16	µg/L	97
23) Dibromomethane	12.88	93	79106	2.36	µg/L	99
24) 1,1-Dichloroethane	7.73	63	187045	2.54	µg/L	97
25) 1,2-Dichloroethane	10.85	62	114127	2.37	µg/L #	87
26) 1,1-Dichloroethene	5.23	96	91667	2.40	µg/L	97
28) cis-1,2-Dichloroethene	8.96	96	103023	2.35	µg/L	93
29) trans-1,2-Dichloroethene	6.84	96	95442	2.34	µg/L	97
30) 1,3-Dichloropropane	16.17	76	102525	2.38	µg/L	98
31) 1,1-Dichloropropene	10.37	75	167055	2.45	µg/L	99
32) Ethyl methacrylate	15.71	69	66152	2.44	µg/L #	89
33) Methylene chloride	6.26	84	82814	2.40	µg/L	98
34) Methyl methacrylate	12.99	69	27927	2.50	µg/L #	70
36) Vinyl chloride	3.09	62	73898	2.67	µg/L	98
38) Benzene	10.79	78	255971	2.47	µg/L	100
39) Bromodichloromethane	13.24	83	196320	2.88	µg/L #	99

(#) = qualifier out of range (m) = manual integration  
 0828e02m.d M691.M Fri Aug 29 07:53:09 1997

MSD5

Page 1

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e02m.d  
 Acq On : 28 Aug 97 9:33 pm  
 Sample : VSTD002 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:08 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.35	117	213494	2.43	µg/L	97
41) Chlorodibromomethane	16.65	129	123656	2.95	µg/L #	100
42) Chlorobenzene	17.99	112	236679	2.22	µg/L	98
43) 1,2-Dibromoethane	16.88	107	95414	2.38	µg/L #	94
44) cis-1,4-Dichloro-2-butene	20.57	75	6979	1.28	µg/L m↑	36
45) trans-1,4-Dichloro-2-butene	21.25	53	12106	1.44	µg/L m↑	1
46) 1,2-Dichloropropane	12.62	63	108960	2.69	µg/L #	100
47) cis-1,3-Dichloropropene	14.21	75	139226	2.38	µg/L S/L	99
48) trans-1,3-Dichloropropene	15.44	75	104359	2.35	µg/L	99
49) Ethylbenzene	18.26	91	380166	2.31	µg/L	99
50) 2-Hexanone	16.45	43	89865	12.22	µg/L #	97
51) 4-Methyl-2-pentanone	14.59	43	172654	14.42	µg/L	92
52) Styrene	19.47	104	213307	2.24	µg/L	100
53) 1,1,1,2-Tetrachloroethane	18.19	131	121366	2.25	µg/L	97
54) 1,1,2,2-Tetrachloroethane	21.00	83	83867	2.47	µg/L #	97
55) Tetrachloroethene	16.09	164	114772	2.13	µg/L	99
56) Toluene	14.90	91	301553	2.32	µg/L	97
57) 1,1,1-Trichloroethane	9.99	97	221432	2.40	µg/L	95
58) 1,1,2-Trichloroethane	15.81	97	66906	2.41	µg/L #	97
59) Trichloroethene	12.17	95	142023	2.40	µg/L	99
60) m,p-Xylene	18.54	106	275318	4.49	µg/L	96
61) o-Xylene	19.43	106	131694	2.25	µg/L	97
62) Xylene (total)	19.43	106	131694	2.25	µg/L	97
64) Bromoform	19.87	173	52673	2.96	µg/L #	91
65) Bromobenzene	20.95	156	107311	2.29	µg/L	6
66) n-Butylbenzene	24.31	91	338755	2.52	µg/L	100
67) tert-Butylbenzene	22.44	119	396540	2.39	µg/L	97
68) sec-Butylbenzene	22.96	105	470481	2.47	µg/L	100
69) n-Propylbenzene	21.27	91	443129	2.45	µg/L	98
70) 2-Chlorotoluene	21.42	91	324503	2.53	µg/L	96
71) 4-Chlorotoluene	21.70	91	354104	2.46	µg/L	98
72) 1,2-Dibromo-3-chloropropan	25.92	75	14963	3.35	µg/L #	78
73) 1,2-Dichlorobenzene	24.26	146	155107	2.16	µg/L	95
74) 1,3-Dichlorobenzene	23.18	146	188771	2.23	µg/L	99
75) 1,4-Dichlorobenzene	23.39	146	207830	2.33	µg/L	94
76) Hexachlorobutadiene	27.40	225	106571	2.32	µg/L	99
77) p-Isopropyltoluene	23.33	119	343496	2.40	µg/L	100
78) Naphthalene	27.51	128	58597	2.14	µg/L	100
79) Pentachloroethane	22.45	167	74738	2.43	µg/L	97
80) 1,2,4-Trichlorobenzene	27.14	180	85391	2.12	µg/L	97
81) 1,2,3-Trichlorobenzene	27.90	180	71582	2.23	µg/L	95
82) 1,2,3-Trichloropropane	21.09	75	63710	2.57	µg/L #	100
83) 1,3,5-Trimethylbenzene	21.70	105	324472	2.48	µg/L	98
84) 1,2,4-Trimethylbenzene	22.55	105	316018	2.42	µg/L	95

(#) = qualifier out of range (m) = manual integration

0828e02m.d M691.M Fri Aug 29 07:53:12 1997

MSD5

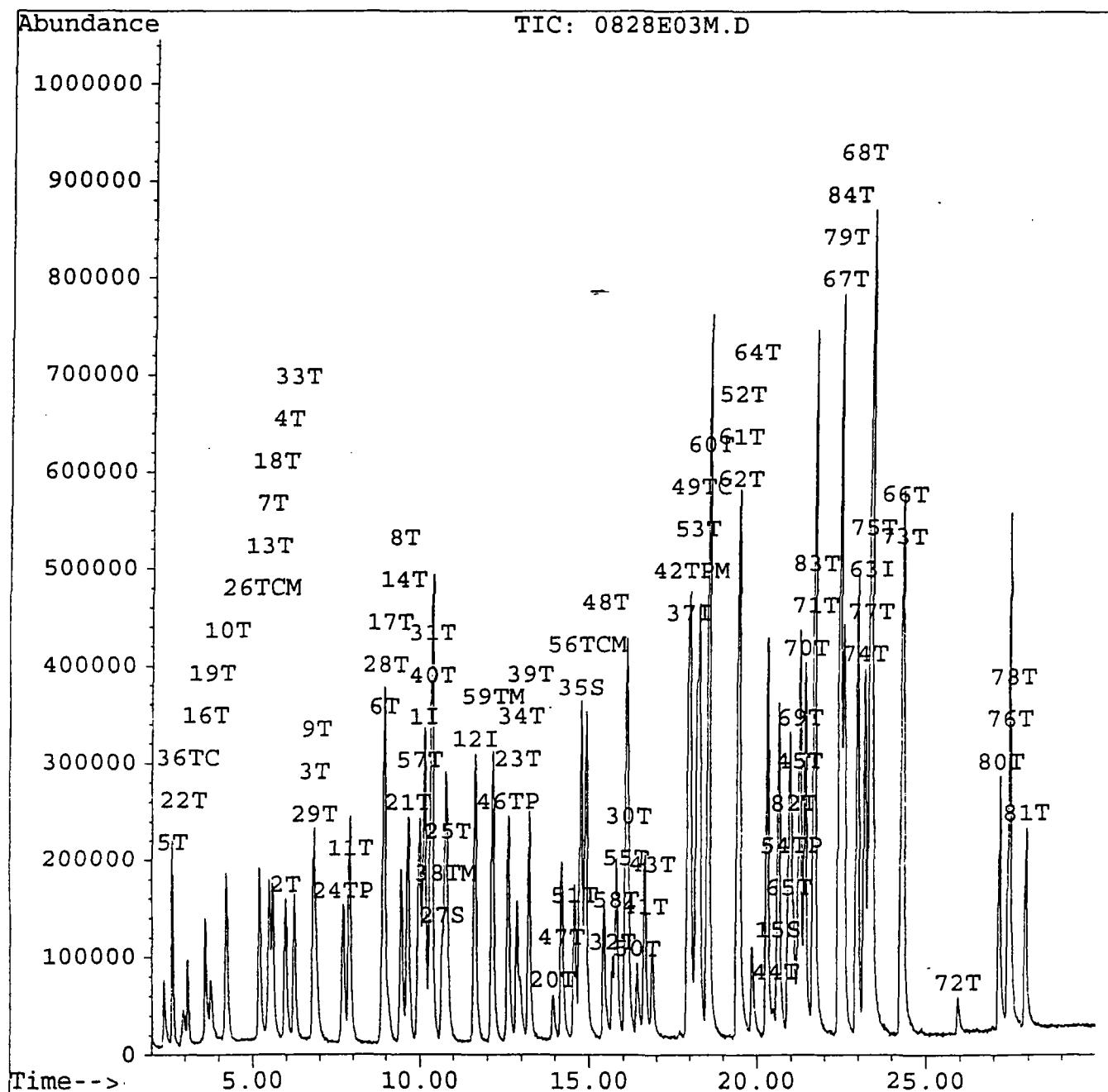
Page 2

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e03m.d  
 Acq On : 28 Aug 97 10:09 pm  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:12 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration



**Quantitation Report**

**Data File :** c:\hpchem\1\data\970828e.b\0828e03m.d  
**Acq On :** 28 Aug 97 10:09 pm  
**Sample :** VSTD005 IEA MSD5  
**Misc :** WATER LOW 1X  
**Quant Time:** Aug 29 7:12 1997

**Vial:** 16  
**Operator:** CREWES  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** C:\HPCHEM\1\DATA\970828E.B\M691.M  
**Title :** 6/91 IEA MSD5  
**Last Update :** Fri Aug 29 07:41:06 1997  
**Response via :** Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.12	168	614516	5.00	µg/L	-0.03
12) 1,4-Difluorobenzene	11.62	114	689047	5.00	µg/L	-0.03
37) Chlorobenzene-d5	17.92	117	538964	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.33	152	288488	5.00	µg/L	0.00
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.63	95	421886	5.20	µg/L	104.09%
27) 1,2-Dichloroethane-d4	10.67	102	44072	5.29	µg/L	105.71%
35) Toluene-d8	14.75	98	685963	5.41	µg/L	104.24%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	5.97	41	278968	8.32	µg/L	100
3) Acrylonitrile	6.82	53	17935	7.02	µg/L	# 53
4) Allyl chloride	5.97	76	95921	5.72	µg/L	95
5) Dichlorodifluoromethane	2.63	85	409231	6.15	µg/L	99
6) 2,2-Dichloropropane	8.90	77	437440	5.68	µg/L	100
7) Iodomethane	5.48	142	540322	5.45	µg/L	100
8) Methacrylonitrile	9.46	41	39010	6.02	µg/L	# 100
9) Methyl-tert-Butyl ether	6.88	73	291094	5.74	µg/L	# 73
10) Trichlorofluoromethane	4.21	101	423254	5.64	µg/L	99
11) Vinyl acetate	7.89	43	235048	6.43	µg/L	99
13) Acetone	5.40	43	68988	28.21	µg/L	# 51
14) Bromochloromethane	9.43	128	126325	5.30	µg/L	99
16) Bromomethane	3.59	94	175936	5.44	µg/L	99
17) 2-Butanone	9.06	43	117947	30.15	µg/L	100
18) Carbon disulfide	5.60	76	569853	5.53	µg/L	100
19) Chloroethane	3.75	64	78697	4.76	µg/L	96
20) 2-Chloroethyl vinyl ether	13.93	63	71589	6.50	µg/L	# 89
21) Chloroform	9.64	83	530166	5.33	µg/L	99
22) Chloromethane	2.94	50	139355	6.69	µg/L	100
23) Dibromomethane	12.86	93	183684	5.63	µg/L	98
24) 1,1-Dichloroethane	7.70	63	419948	5.79	µg/L	97
25) 1,2-Dichloroethane	10.81	62	263784	5.62	µg/L	100
26) 1,1-Dichloroethene	5.20	96	196703	5.28	µg/L	97
28) cis-1,2-Dichloroethene	8.94	96	235992	5.54	µg/L	98
29) trans-1,2-Dichloroethene	6.80	96	210878	5.33	µg/L	96
30) 1,3-Dichloropropane	16.15	76	237078	5.59	µg/L	99
31) 1,1-Dichloropropene	10.33	75	372470	5.56	µg/L	99
32) Ethyl methacrylate	15.68	69	158674	5.84	µg/L	# 97
33) Methylene chloride	6.23	84	185637	5.48	µg/L	98
34) Methyl methacrylate	12.97	69	62421	5.58	µg/L	# 95
36) Vinyl chloride	3.08	62	159232	5.73	µg/L	99
38) Benzene	10.76	78	593458	5.61	µg/L	100
39) Bromodichloromethane	13.21	83	462738	6.39	µg/L	99

(#) = qualifier out of range (m) = manual integration  
 0828e03m.d M691.M Fri Aug 29 07:53:48 1997 MSD5 Page 1

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e03m.d  
 Acq On : 28 Aug 97 10:09 pm  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:12 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.31	117	481378	5.44	µg/L	98
41) Chlorodibromomethane	16.63	129	286235	6.35	µg/L #	97
42) Chlorobenzene	17.98	112	556399	5.25	µg/L	98
43) 1,2-Dibromoethane	16.86	107	220662	5.46	µg/L #	99
44) cis-1,4-Dichloro-2-butene	20.56	75	17849	3.10	µg/L m	43
45) trans-1,4-Dichloro-2-butene	21.23	53	29540	3.34	µg/L m	1
46) 1,2-Dichloropropane	12.61	63	252359	6.01	µg/L <i>Suspect</i>	99
47) cis-1,3-Dichloropropene	14.18	75	334802	5.64	µg/L	99
48) trans-1,3-Dichloropropene	15.41	75	257322	5.76	µg/L	97
49) Ethylbenzene	18.26	91	901166	5.46	µg/L	100
50) 2-Hexanone	16.42	43	213580	28.06	µg/L #	89
51) 4-Methyl-2-pentanone	14.57	43	421545	33.04	µg/L	96
52) Styrene	19.47	104	522564	5.50	µg/L	99
53) 1,1,1,2-Tetrachloroethane	18.18	131	285683	5.31	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.00	83	188676	5.42	µg/L	98
55) Tetrachloroethene	16.08	164	273901	5.19	µg/L	98
56) Toluene	14.88	91	725154	5.54	µg/L	100
57) 1,1,1-Trichloroethane	9.97	97	491218	5.31	µg/L	94
58) 1,1,2-Trichloroethane	15.78	97	159822	5.69	µg/L	98
59) Trichloroethene	12.15	95	326068	5.46	µg/L	99
60) m,p-Xylene	18.54	106	654682	10.76	µg/L	98
61) o-Xylene	19.43	106	311788	5.36	µg/L	94
62) Xylene (total)	19.43	106	311788	5.36	µg/L	94
64) Bromoform	19.85	173	121531	5.95	µg/L #	100
65) Bromobenzene	20.94	156	255634	5.11	µg/L	97
66) n-Butylbenzene	24.30	91	805569	5.50	µg/L	96
67) tert-Butylbenzene	22.43	119	934543	5.27	µg/L	100
68) sec-Butylbenzene	22.96	105	1122724	5.45	µg/L	99
69) n-Propylbenzene	21.25	91	1069297	5.44	µg/L	100
70) 2-Chlorotoluene	21.42	91	751123	5.39	µg/L	99
71) 4-Chlorotoluene	21.68	91	838844	5.39	µg/L	95
72) 1,2-Dibromo-3-chloropropan	25.93	75	34649	6.63	µg/L #	85
73) 1,2-Dichlorobenzene	24.25	146	387385	5.13	µg/L	97
74) 1,3-Dichlorobenzene	23.17	146	453795	5.04	µg/L	99
75) 1,4-Dichlorobenzene	23.39	146	495834	5.19	µg/L	94
76) Hexachlorobutadiene	27.41	225	253724	5.21	µg/L	98
77) p-Isopropyltoluene	23.32	119	820789	5.32	µg/L	98
78) Naphthalene	27.51	128	157242	5.40	µg/L	100
79) Pentachloroethane	22.45	167	172015	5.16	µg/L	98
80) 1,2,4-Trichlorobenzene	27.14	180	218270	5.12	µg/L	97
81) 1,2,3-Trichlorobenzene	27.91	180	179370	5.25	µg/L	96
82) 1,2,3-Trichloropropane	21.07	75	150568	5.55	µg/L #	77
83) 1,3,5-Trimethylbenzene	21.69	105	757725	5.35	µg/L	99
84) 1,2,4-Trimethylbenzene	22.56	105	758308	5.37	µg/L	97

(#) = qualifier out of range (m) = manual integration

0828e03m.d M691.M Fri Aug 29 07:53:50 1997

MSD5

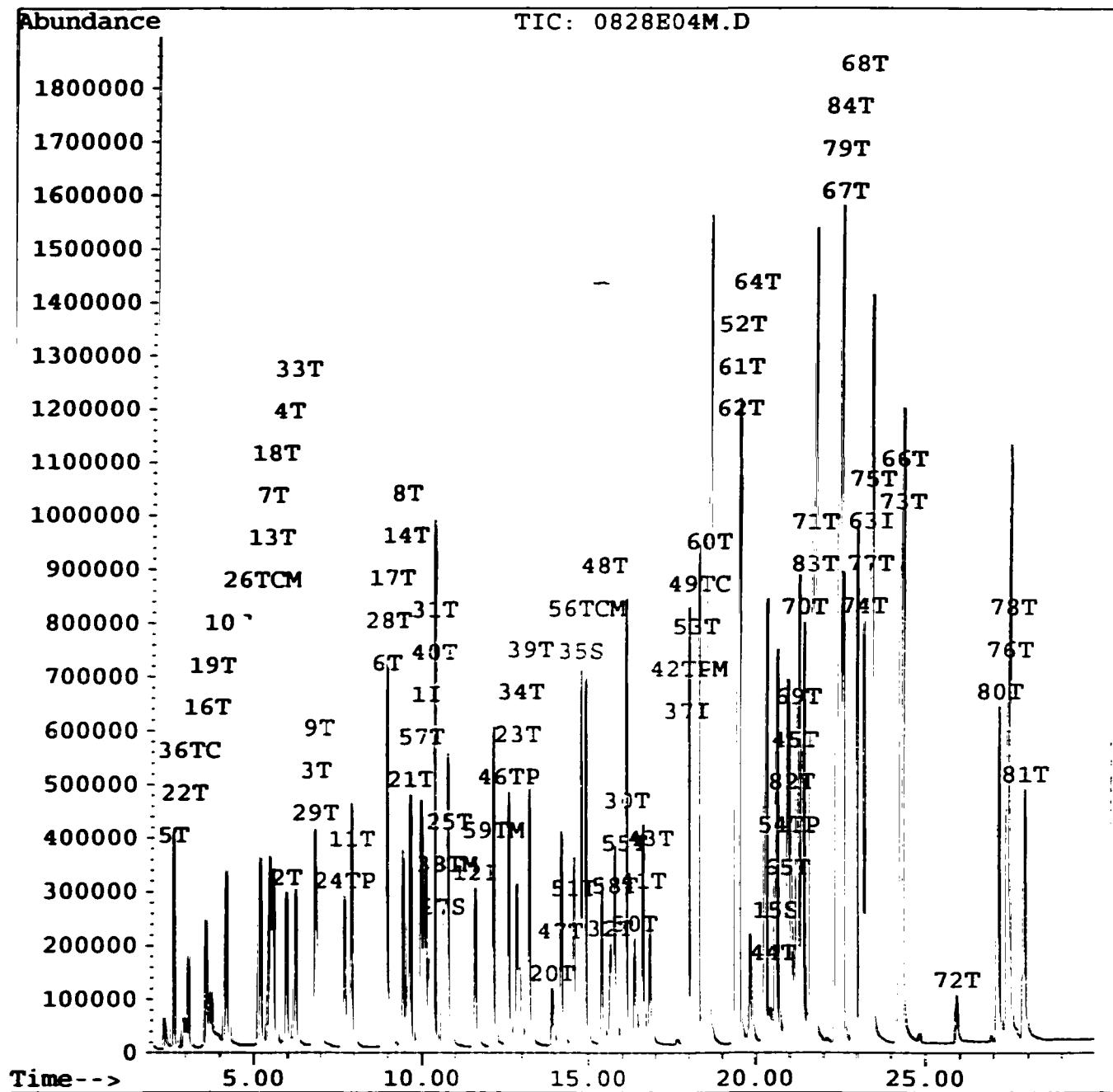
Page 2

## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e04m.d  
Acq On : 28 Aug 97 10:46 pm  
Sample : VSTD010 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 29 7:15 1997

Vial: 16  
Operator: CREWES  
Inst : MSD5  
Dilution: 1.00

**Method** : C:\HPCHEM\1\DATA\970828E.B\M691.M  
**Title** : 6/91 IEA MSD5  
**Last Update** : Fri Aug 29 07:41:06 1997  
**Response via** : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e04m.d  
 Acq On : 28 Aug 97 10:46 pm  
 Sample : VSTD010 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:15 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.11	168	616531	5.00	µg/L	0.00
12) 1,4-Difluorobenzene	11.62	114	697092	5.00	µg/L	0.00
37) Chlorobenzene-d5	17.91	117	554874	5.00	µg/L	-0.01
63) 1,4-Dichlorobenzene-d4	23.30	152	294162	5.00	µg/L	-0.03
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.60	95	863262	10.51	µg/L	210.15%
27) 1,2-Dichloroethane-d4	10.65	102	92957	11.05	µg/L	220.93%
35) Toluene-d8	14.73	98	1383061	10.64	µg/L	212.73%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	5.98	41	564101	16.53	µg/L	100
3) Acrylonitrile	6.84	53	35419	12.87	µg/L	# 95
4) Allyl chloride	5.97	76	193154	11.09	µg/L	100
5) Dichlorodifluoromethane	2.63	85	804212	11.46	µg/L	100
6) 2,2-Dichloropropane	8.90	77	873784	10.94	µg/L	100
7) Iodomethane	5.48	142	1107454	10.95	µg/L	100
8) Methacrylonitrile	9.48	41	83396	11.93	µg/L	# 95
9) Methyl-tert-Butyl ether	6.91	73	600584	11.42	µg/L	96
10) Trichlorofluoromethane	4.20	101	817628	10.90	µg/L	99
11) Vinyl acetate	7.89	43	482674	12.19	µg/L	99
13) Acetone	5.46	43	145235	57.55	µg/L	# 78
14) Bromochloromethane	9.43	128	266026	10.93	µg/L	98
16) Bromomethane	3.59	94	370612	11.15	µg/L	96
17) 2-Butanone	9.05	43	263470	63.38	µg/L	97
18) Carbon disulfide	5.59	76	1137700	10.64	µg/L	100
19) Chloroethane	3.75	64	147799	8.74	µg/L	100
20) 2-Chloroethyl vinyl ether	13.90	63	148191	12.64	µg/L	96
21) Chloroform	9.64	83	1072103	10.53	µg/L	100
22) Chloromethane	2.94	50	264903	11.60	µg/L	97
23) Dibromomethane	12.85	93	378652	11.22	µg/L	99
24) 1,1-Dichloroethane	7.69	63	815645	10.70	µg/L	100
25) 1,2-Dichloroethane	10.81	62	546721	11.29	µg/L	100
26) 1,1-Dichloroethene	5.19	96	390502	10.24	µg/L	99
28) cis-1,2-Dichloroethene	8.94	96	467270	10.61	µg/L	99
29) trans-1,2-Dichloroethene	6.81	96	420629	10.36	µg/L	100
30) 1,3-Dichloropropane	16.12	76	489361	11.12	µg/L	96
31) 1,1-Dichloropropene	10.33	75	732370	10.55	µg/L	99
32) Ethyl methacrylate	15.66	69	323126	11.28	µg/L	96
33) Methylene chloride	6.23	84	368621	10.48	µg/L	100
34) Methyl methacrylate	12.94	69	132037	11.15	µg/L	92
36) Vinyl chloride	3.08	62	326236	11.19	µg/L	99
38) Benzene	10.75	78	1186304	10.56	µg/L	100
39) Bromodichloromethane	13.20	83	936860	11.72	µg/L	99

(#) = qualifier out of range (m) = manual integration  
 0828e04m.d M691.M Fri Aug 29 07:54:26 1997

MSD5 Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e04m.d  
 Acq On : 28 Aug 97 10:46 pm  
 Sample : VSTD010 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:15 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.31	117	965415	10.38	µg/L	100
41) Chlorodibromomethane	16.61	129	606145	12.11	µg/L #	99
42) Chlorobenzene	17.96	112	1135547	10.26	µg/L	99
43) 1,2-Dibromoethane	16.84	107	468694	11.09	µg/L	99
44) cis-1,4-Dichloro-2-butene	20.54/	75	45885	7.18	µg/L m/s	45
45) trans-1,4-Dichloro-2-butene	21.14	53	57136	5.81	µg/L #	1
46) 1,2-Dichloropropane	12.60	63	504588	11.12	µg/L <i>Sublim</i>	99
47) cis-1,3-Dichloropropene	14.17/	75	688658	10.95	µg/L	98
48) trans-1,3-Dichloropropene	15.39/	75	526132	11.10	µg/L	19
49) Ethylbenzene	18.24/	91	1833447	10.56	µg/L	99
50) 2-Hexanone	16.38/	43	553220	68.25	µg/L	93
51) 4-Methyl-2-pentanone	14.55/	43	893984	63.58	µg/L	99
52) Styrene	19.44	104	1058181	10.62	µg/L	100
53) 1,1,1,2-Tetrachloroethane	18.15	131	597742	10.63	µg/L	98
54) 1,1,2,2-Tetrachloroethane	20.98	83	404182	11.00	µg/L	100
55) Tetrachloroethylene	16.06	164	537352	9.84	µg/L	99
56) Toluene	14.86	91	1460667	10.57	µg/L	99
57) 1,1,1-Trichloroethane	9.96/	97	996241	10.33	µg/L	96
58) 1,1,2-Trichloroethane	15.76/	97	321196	10.82	µg/L	99
59) Trichloroethylene	12.13	95	643229	10.26	µg/L	99
60) m,p-Xylene	18.51/	106	1320014	20.77	µg/L	99
61) o-Xylene	19.40/	106	633727	10.43	µg/L	100
62) Xylene (total)	19.40	106	633727	10.43	µg/L	100
64) Bromoform	19.83	173	270216	12.12	µg/L	98
65) Bromobenzene	20.92	156	534452	10.33	µg/L	99
66) n-Butylbenzene	24.28/	91	1682061	10.94	µg/L	18
67) tert-Butylbenzene	22.40/	119	1900347	10.28	µg/L	91
68) sec-Butylbenzene	22.92/	105	2294999	10.58	µg/L	100
69) n-Propylbenzene	21.22/	91	2244160	10.84	µg/L	98
70) 2-Chlorotoluene	21.39/	91	1482734	10.09	µg/L	98
71) 4-Chlorotoluene	21.65/	91	1706003	10.44	µg/L	97
72) 1,2-Dibromo-3-chloropropane	25.91	75	79346	13.57	µg/L	95
73) 1,2-Dichlorobenzene	24.23/	146	819616	10.55	µg/L	98
74) 1,3-Dichlorobenzene	23.14/	146	937640	10.10	µg/L	100
75) 1,4-Dichlorobenzene	23.36/	146	988560	10.00	µg/L	100
76) Hexachlorobutadiene	27.40	225	520070	10.33	µg/L	100
77) p-Isopropyltoluene	23.30/	119	1672949	10.39	µg/L	100
78) Naphthalene	27.49	128	361514	12.07	µg/L	100
79) Pentachloroethane	22.42	167	360288	10.40	µg/L	99
80) 1,2,4-Trichlorobenzene	27.12/	180	493705	11.27	µg/L	99
81) 1,2,3-Trichlorobenzene	27.88/	180	392751	11.24	µg/L	98
82) 1,2,3-Trichloropropane	21.06	75	325827	11.39	µg/L	99
83) 1,3,5-Trimethylbenzene	21.65/	105	1514783	10.19	µg/L	99
84) 1,2,4-Trimethylbenzene	22.53/	105	1522911	10.31	µg/L	97

(#) = qualifier out of range (m) = manual integration  
 0828e04m.d M691.M Fri Aug 29 07:54:28 1997

MSD5

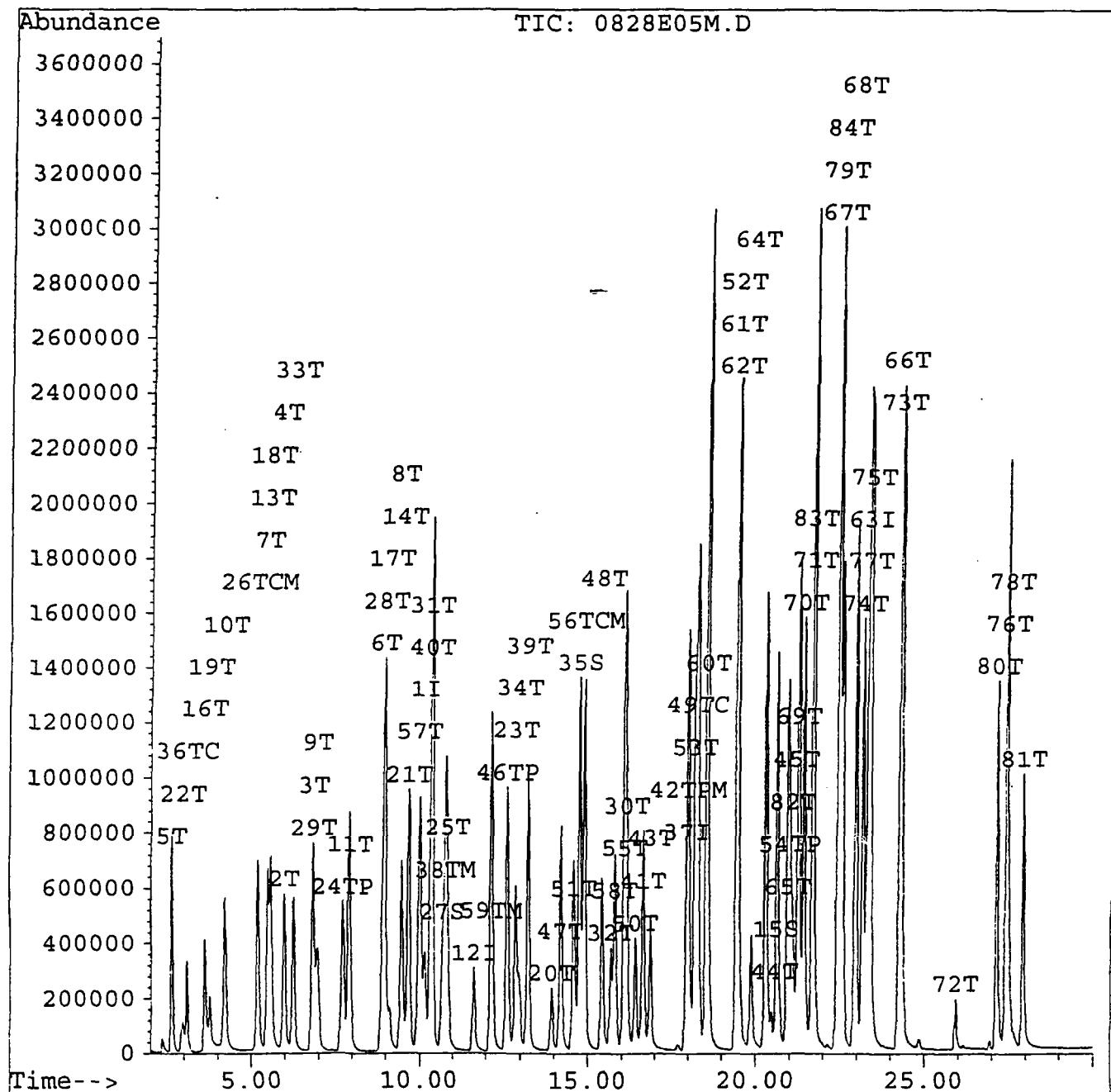
Page 2

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e05m.d  
 Acq On : 28 Aug 97 11:22 pm  
 Sample : VSTD020 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:23 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration



**Quantitation Report**

**Data File :** c:\hpchem\1\data\970828e.b\0828e05m.d  
**Acq On :** 28 Aug 97 11:22 pm  
**Sample :** VSTD020 IEA MSD5  
**Misc :** WATER LOW 1X  
**Quant Time:** Aug 29 7:23 1997

**Vial:** 16  
**Operator:** CREWES  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** C:\HPCHEM\1\DATA\970828E.B\M691.M  
**Title :** 6/91 IEA MSD5  
**Last Update :** Fri Aug 29 07:41:06 1997  
**Response via :** Multiple Level Calibration

Internal Standards	R.T.	QION	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.12	168	628474	5.00	µg/L	0.01
12) 1,4-Difluorobenzene	11.63	114	700542	5.00	µg/L	0.00
37) Chlorobenzene-d5	17.92	117	553706	5.00	µg/L	0.01
63) 1,4-Dichlorobenzene-d4	23.32	152	285692	5.00	µg/L	0.02
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.62	95	1626531	19.49	µg/L	389.80
27) 1,2-Dichloroethane-d4	10.66	102	178463	20.91	µg/L	4 <sup>-</sup> 14
35) Toluene-d8	14.74	98	2651454	19.90	µg/L	35 <sup>-</sup> 0.07
<b>Target Compounds</b>						Qvalue
2) Acetonitrile	5.96	41	1107320	30.02	µg/L	100
3) Acrylonitrile	6.85	53	65230	21.63	µg/L	# 87
4) Allyl chloride	5.96	76	384406	20.66	µg/L	98
5) Dichlorodifluoromethane	2.63	85	1628377	21.54	µg/L	100
6) 2,2-Dichloropropane	8.93	77	1720874	20.29	µg/L	100
7) Iodomethane	5.48	142	2277379	21.37	µg/L	100
8) Methacrylonitrile	9.49	41	165573	21.27	µg/L	# 87
9) Methyl-tert-Butyl ether	6.95	73	1144797	20.30	µg/L	97
10) Trichlorofluoromethane	4.18	101	1291669	16.66	µg/L	99
11) Vinyl acetate	7.92	43	915924	20.90	µg/L	99
13) Acetone	5.53	43	279475	104.33	µg/L	99
14) Bromochloromethane	9.44	128	509664	20.24	µg/L	99
16) Bromomethane	3.59	94	729025	20.99	µg/L	98
17) 2-Butanone	9.11	43	532496	120.34	µg/L	88
18) Carbon disulfide	5.58	76	2295858	20.63	µg/L	100
19) Chloroethane	3.75	64	285502	16.47	µg/L	100
20) 2-Chloroethyl vinyl ether	13.92	63	295177	23.49	µg/L	98
21) Chloroform	9.65	83	2176328	20.70	µg/L	100
22) Chloromethane	2.97	50	516420	20.89	µg/L	100
23) Dibromomethane	12.86	93	738282	20.90	µg/L	99
24) 1,1-Dichloroethane	7.69	63	1666151	20.98	µg/L	99
25) 1,2-Dichloroethane	10.81	62	1062615	20.99	µg/L	99
26) 1,1-Dichloroethene	5.18	96	777322	19.80	µg/L	99
28) cis-1,2-Dichloroethene	8.94	96	917488	20.16	µg/L	99
29) trans-1,2-Dichloroethene	6.80	96	832833	19.91	µg/L	99
30) 1,3-Dichloropropane	16.15	76	927012	20.17	µg/L	99
31) 1,1-Dichloropropene	10.33	75	1450598	20.10	µg/L	99
32) Ethyl methacrylate	15.68	69	626662	20.71	µg/L	99
33) Methylene chloride	6.24	84	714974	19.70	µg/L	99
34) Methyl methacrylate	12.96	69	260736	20.87	µg/L	90
36) Vinyl chloride	3.09	62	664550	21.60	µg/L	98
38) Benzene	10.76	78	2332051	20.06	µg/L	100
39) Bromodichloromethane	13.22	83	1852893	21.64	µg/L	99

(#) = qualifier out of range (m) = manual integration  
 0828e05m.d M691.M Fri Aug 29 07:55:05 1997

MSD5

Page 1

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e05m.d  
 Acq On : 28 Aug 97 11:22 pm  
 Sample : VSTD020 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:23 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.32	117	1933410	20.20	µg/L	100
41) Chlorodibromomethane	16.63	129	1190701	22.02	µg/L	100
42) Chlorobenzene	17.98	112	2232205	19.83	µg/L	100
43) 1,2-Dibromoethane	16.86	107	905193	20.71	µg/L	100
44) cis-1,4-Dichloro-2-butene	20.55	75	86240	12.56	µg/L	65
45) trans-1,4-Dichloro-2-butene	21.16	53	113348	10.74	µg/L	97
46) 1,2-Dichloropropane	12.61	63	1008854	21.23	µg/L	99
47) cis-1,3-Dichloropropene	14.18	75	1340698	20.60	µg/L	100
48) trans-1,3-Dichloropropene	15.40	75	1046259	21.36	µg/L	100
49) Ethylbenzene	18.26	91	3623879	20.30	µg/L	100
50) 2-Hexanone	16.40	43	1037021	118.14	µg/L	99
51) 4-Methyl-2-pentanone	14.57	43	1732344	114.50	µg/L	99
52) Styrene	19.47	104	2046961	20.10	µg/L	99
53) 1,1,1,2-Tetrachloroethane	18.17	131	1163782	20.18	µg/L	99
54) 1,1,2,2-Tetrachloroethane	20.99	83	750533	19.66	µg/L	100
55) Tetrachloroethene	16.07	164	1078225	19.61	µg/L	100
56) Toluene	14.89	91	2861408	20.10	µg/L	100
57) 1,1,1-Trichloroethane	9.98	97	1999194	20.24	µg/L	98
58) 1,1,2-Trichloroethane	15.79	97	625616	20.40	µg/L	97
59) Trichloroethene	12.14	95	1296919	20.22	µg/L	98
60) m,p-Xylene	18.54	106	2594435	39.89	µg/L	99
61) o-Xylene	19.43	106	1249051	20.18	µg/L	99
62) Xylene (total)	19.43	106	1249051	20.18	µg/L	99
64) Bromoform	19.85	173	539717	22.94	µg/L	100
65) Bromobenzene	20.94	156	1044842	20.34	µg/L	99
66) n-Butylbenzene	24.29	91	3366749	21.51	µg/L	97
67) tert-Butylbenzene	22.42	119	3674737	19.86	µg/L	99
68) sec-Butylbenzene	22.94	105	4418836	20.19	µg/L	100
69) n-Propylbenzene	21.24	91	4418897	21.08	µg/L	99
70) 2-Chlorotoluene	21.41	91	2948887	19.96	µg/L	99
71) 4-Chlorotoluene	21.66	91	3309901	20.12	µg/L	99
72) 1,2-Dibromo-3-chloropropan	25.91	75	141755	22.23	µg/L	92
73) 1,2-Dichlorobenzene	24.26	146	1529314	19.80	µg/L	98
74) 1,3-Dichlorobenzene	23.16	146	1822345	19.89	µg/L	100
75) 1,4-Dichlorobenzene	23.37	146	1873865	19.15	µg/L	99
76) Hexachlorobutadiene	27.41	225	1018142	20.35	µg/L	99
77) p-Isopropyltoluene	23.31	119	3302069	20.45	µg/L	99
78) Naphthalene	27.50	128	762740	24.58	µg/L	100
79) Pentachloroethane	22.44	167	687305	19.87	µg/L	99
80) 1,2,4-Trichlorobenzene	27.12	180	1003523	22.72	µg/L	99
81) 1,2,3-Trichlorobenzene	27.89	180	792641	22.44	µg/L	99
82) 1,2,3-Trichloropropane	21.07	75	624757	21.40	µg/L	# 34
83) 1,3,5-Trimethylbenzene	21.67	105	2971055	19.90	µg/L	99
84) 1,2,4-Trimethylbenzene	22.54	105	3047561	20.54	µg/L	100

(#) = qualifier out of range (m) = manual integration

0828e05m.d M691.M Fri Aug 29 07:55:07 1997

MSD5

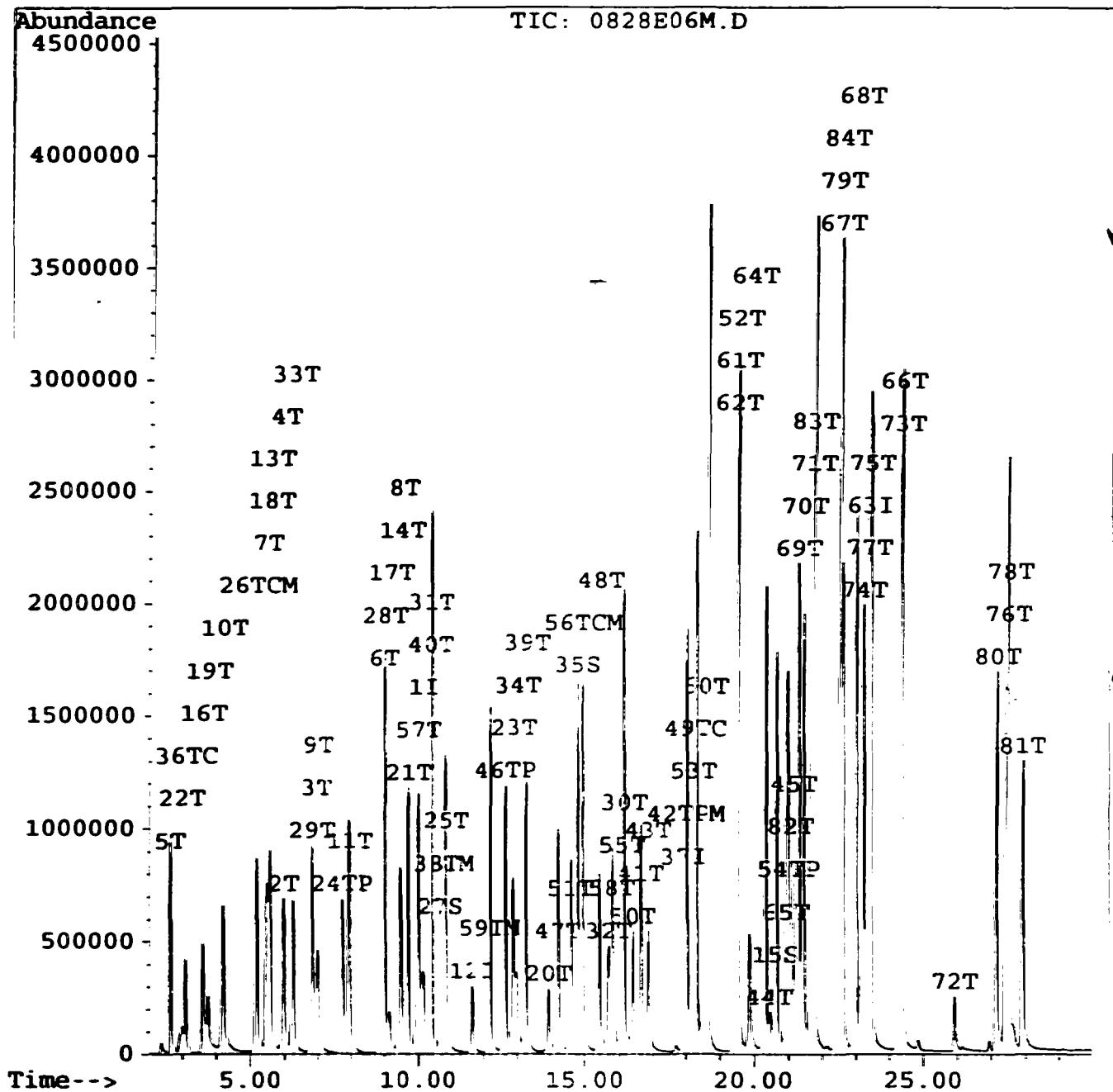
Page 2

Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e06m.d  
 Acq On : 28 Aug 97 11:59 pm  
 Sample : VSTD025 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:32 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e06m.d  
 Acq On : 28 Aug 97 11:59 pm  
 Sample : VSTD025 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:32 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)-
1) Pentafluorobenzene	10.12	168	617593	5.00	µg/L	0.00
12) 1,4-Difluorobenzene	11.63	114	695739	5.00	µg/L	0.00
37) Chlorobenzene-d5	17.91	117	541950	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.31	152	283110	5.00	µg/L	-0.02

System Monitoring Compounds				%Recovery
15) 4-Bromofluorobenzene	20.61	95	1978594	23.69 µg/L 473.77%
27) 1,2-Dichloroethane-d4	10.67	102	218850	25.54 µg/L 510.84%
35) Toluene-d8	14.74	98	3229656	24.10 µg/L 482.01%

Target Compounds				Qvalue -
2) Acetonitrile	5.95	41	1375435	31.78 µg/L 100
3) Acrylonitrile	6.89	53	84327	26.94 µg/L # 90
4) Allyl chloride	5.96	76	473708	25.00 µg/L 99
5) Dichlorodifluoromethane	2.62	85	2018920	25.91 µg/L 100
6) 2,2-Dichloropropane	8.91	77	2163986	25.27 µg/L 99
7) Iodomethane	5.47	142	2776051	25.84 µg/L 99
8) Methacrylonitrile	9.51	41	213592	26.06 µg/L 96
9) Methyl-tert-Butyl ether	6.97	73	1425886	24.87 µg/L 99
10) Trichlorofluoromethane	4.18	101	1569267	20.43 µg/L 99
11) Vinyl acetate	7.93	43	1189301	25.99 µg/L 99
13) Acetone	5.56	43	350659	124.73 µg/L 98
14) Bromochloromethane	9.45	128	624626	24.37 µg/L 100
16) Bromomethane	3.59	94	949186	26.70 µg/L 100
17) 2-Butanone	9.12	43	670465	142.72 µg/L 99
18) Carbon disulfide	5.56	76	2786704	24.44 µg/L 100
19) Chloroethane	3.75	64	349996	20.01 µg/L 99
20) 2-Chloroethyl vinyl ether	13.93	63	376034	28.67 µg/L 99
21) Chloroform	9.66	83	2691299	25.08 µg/L 100
22) Chloromethane	2.95	50	629621	23.96 µg/L 100
23) Dibromomethane	12.86	93	920967	25.40 µg/L 99
24) 1,1-Dichloroethane	7.69	63	2083558	25.41 µg/L 99
25) 1,2-Dichloroethane	10.82	62	1314462	25.29 µg/L 100
26) 1,1-Dichloroethene	5.18	96	983732	24.72 µg/L 99
28) cis-1,2-Dichloroethene	8.94	96	1140494	24.59 µg/L 99
29) trans-1,2-Dichloroethene	6.79	96	1035596	24.44 µg/L 99
30) 1,3-Dichloropropane	16.14	76	1161571	24.81 µg/L 100
31) 1,1-Dichloropropene	10.32	75	1807288	24.58 µg/L 99
32) Ethyl methacrylate	15.67	69	774038	24.86 µg/L 99
33) Methylene chloride	6.23	84	880237	23.76 µg/L 99
34) Methyl methacrylate	12.96	69	326133	25.30 µg/L 99
36) Vinyl chloride	3.08	62	808691	25.26 µg/L 99
38) Benzene	10.76	78	2922606	25.00 µg/L 100
39) Bromodichloromethane	13.22	83	2313311	26.12 µg/L 99

(#) = qualifier out of range (m) = manual integration

0828e06m.d M691.M Fri Aug 29 07:55:44 1997

MSD5

Page 1

## Quantitation Report

Data File : c:\hpchem\1\data\970828e.b\0828e06m.d  
 Acq On : 28 Aug 97 11:59 pm  
 Sample : VSTD025 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 7:32 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 07:41:06 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.32	117	2409999	25.10	µg/L	100
41) Chlorodibromomethane	16.62	129	1505126	26.79	µg/L	100
42) Chlorobenzene	17.97	112	2752672	24.68	µg/L	100
43) 1,2-Dibromoethane	16.85	107	1131257	25.83	µg/L <i>Sterben</i>	99
44) cis-1,4-Dichloro-2-butene	20.45	75	108260	15.27	µg/L <i>m</i>	62
45) trans-1,4-Dichloro-2-butene	21.14	53	140110	12.89	µg/L	99
46) 1,2-Dichloropropane	12.60	63	1246677	25.68	µg/L	100
47) cis-1,3-Dichloropropene	14.17	75	1667211	25.45	µg/L	98
48) trans-1,3-Dichloropropene	15.40	75	1286907	26.00	µg/L	99
49) Ethylbenzene	18.25	91	4462870	25.03	µg/L	100
50) 2-Hexanone	16.40	43	1359386	148.80	µg/L	99
51) 4-Methyl-2-pentanone	14.57	43	2142468	136.03	µg/L	98
52) Styrene	19.45	104	2548880	25.22	µg/L	99
53) 1,1,1,2-Tetrachloroethane	18.17	131	1448339	25.23	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.00	83	936347	24.48	µg/L	99
55) Tetrachloroethene	16.07	164	1351619	24.97	µg/L	99
56) Toluene	14.88	91	3559182	25.05	µg/L	100
57) 1,1,1-Trichloroethane	9.97	97	2507612	25.38	µg/L <i>#</i>	87
58) 1,1,2-Trichloroethane	15.78	97	795723	25.89	µg/L	98
59) Trichloroethene	12.15	95	1620724	25.26	µg/L	100
60) m,p-Xylene	18.53	106	3180503	49.20	µg/L	99
61) o-Xylene	19.41	106	1537588	25.02	µg/L	100
62) Xylene (total)	19.41	106	1537588	25.02	µg/L	100
64) Bromoform	19.85	173	698235	28.19	µg/L	100
65) Bromobenzene	20.92	156	1308881	25.26	µg/L	99
66) n-Butylbenzene	24.27	91	4214281	26.46	µg/L	100
67) tert-Butylbenzene	22.42	119	4507300	24.12	µg/L	100
68) sec-Butylbenzene	22.94	105	5458814	24.62	µg/L	99
69) n-Propylbenzene	21.23	91	5501791	25.74	µg/L	100
70) 2-Chlorotoluene	21.40	91	3565253	23.70	µg/L	99
71) 4-Chlorotoluene	21.66	91	4068466	24.36	µg/L	99
72) 1,2-Dibromo-3-chloropropan	25.90	75	186462	27.48	µg/L	99
73) 1,2-Dichlorobenzene	24.23	146	1900939	24.65	µg/L	99
74) 1,3-Dichlorobenzene	23.15	146	2282115	24.98	µg/L	100
75) 1,4-Dichlorobenzene	23.37	146	2366455	24.26	µg/L	97
76) Hexachlorobutadiene	27.40	225	1278410	25.29	µg/L	100
77) p-Isopropyltoluene	23.30	119	4123147	25.29	µg/L	99
78) Naphthalene	27.48	128	1005890	31.91	µg/L	100
79) Pentachloroethane	22.42	167	849792	24.44	µg/L	99
80) 1,2,4-Trichlorobenzene	27.11	180	1270903	28.45	µg/L	99
81) 1,2,3-Trichlorobenzene	27.88	180	1012733	28.30	µg/L	99
82) 1,2,3-Trichloropropane	21.06	75	777142	25.87	µg/L <i>#</i>	100
83) 1,3,5-Trimethylbenzene	21.67	105	3652053	24.14	µg/L	100
84) 1,2,4-Trimethylbenzene	22.54	105	3788678	25.19	µg/L	99

(#) = qualifier out of range (m) = manual integration  
 0828e06m.d M691.M Fri Aug 29 07:55:46 1997

MSD5

Page 2

7LCA  
LOW CONC. WATER VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD5

Calibration Date: 08/22/97 Time: 09:00

Lab File ID: 0822501.D

Init. Calib. Date(s): 07/31/97

07/31/97

Heated Purge: (Y/N) N

Init. Calib. Times: 08:03

12:43

GC Column: DB-624 ID: .53 (mm)

COMPOUND	RRF	RRF05	MIN RRF	%D	MAX %D
Acetone	0.015	0.017		-11.4	
Benzene	0.893	1.123	0.500	-25.7	30.0
Bromochloromethane	0.167	0.203	0.050	-21.8	30.0
Bromodichloromethane	0.567	0.679	0.200	-19.7	30.0
Bromoform	0.285	0.376	0.050	-32.1	30.0
Bromomethane	0.225	0.268	0.100	-19.4	30.0
2-Butanone	0.025	0.027		-7.4	
Carbon Disulfide	0.692	0.861		-24.4	
Carbon Tetrachloride	0.772	0.889	0.100	-15.2	30.0
Chlorobenzene	0.941	1.099	0.500	-16.8	30.0
Chloroethane	0.104	0.155		-48.6	
Chloroform	0.690	0.830	0.200	-20.3	30.0
Chloromethane	0.120	0.172		-42.5	
Dibromochloromethane	0.345	0.440	0.100	-27.7	30.0
1,2-Dibromo-3-Chloropropane	0.068	0.073		-6.0	
1,2-Dibromoethane	0.356	0.412	0.100	-15.7	30.0
1,2-Dichlorobenzene	1.251	1.384	0.400	-10.6	30.0
1,3-Dichlorobenzene	1.475	1.655	0.600	-12.2	30.0
1,4-Dichlorobenzene	1.552	1.807	0.500	-16.5	30.0
1,1-Dichloroethane	0.482	0.618	0.200	-28.3	30.0
1,2-Dichloroethane	0.323	0.389	0.100	-20.4	30.0
1,1-Dichloroethene	0.255	0.320	0.100	-25.5	30.0
Cis-1,2-Dichloroethene	0.296	0.356		-20.4	
Trans-1,2-Dichloroethene	0.273	0.342		-25.2	
1,2-Dichloropropane	0.349	0.432		-23.8	
Cis-1,3-Dichloropropene	0.511	0.567	0.200	-11.1	30.0
Trans-1,3-Dichloropropene	0.390	0.412	0.100	-5.4	30.0
Ethylbenzene	1.443	1.702	0.100	-17.9	30.0
2-Hexanone	0.061	0.062		-2.5	
Methylene Chloride	0.227	0.299		-31.5	
4-Methyl-2-Pentanone	0.099	0.116		-16.8	
Styrene	0.848	0.973	0.300	-14.8	30.0
1,1,2,2-Tetrachloroethane	0.286	0.345	0.100	-20.6	30.0
Tetrachloroethene	0.485	0.607	0.200	-25.0	30.0
Toluene	1.134	1.372	0.400	-21.0	30.0
1,1,1-Trichloroethane	0.820	0.939	0.100	-14.5	30.0
1,1,2-Trichloroethane	0.248	0.294	0.100	-18.4	30.0

All other compounds must meet a minimum RRF of 0.010.

**7LCA**  
**LOW CONC. WATER VOLATILE CONTINUING CALIBRATION CHECK**

Lab Name: IEA-NC                          Method: SOW 10/92  
Lab Code: IEA                              Case No.: 1364-226                          SDG No.: 08367  
Instrument ID: MSD5                      Calibration Date: 08/22/97 Time: 09:00  
Lab File ID: 0822501.D                Init. Calib. Date(s): 07/31/97                    07/31/97  
Heated Purge: (Y/N) N                    Init. Calib. Times: 08:03                        12:43  
GC Column: DB-624                      ID: .53 (mm)

COMPOUND	RRF	RRF05	MIN RRF	%D	MAX %D
Trichloroethene	0.527	0.603	0.300	-14.5	30.0
Vinyl Chloride	0.178	0.233	0.100	-31.1	30.0
Xylene (Total)	0.524	0.609	0.300	-16.3	30.0
4-Bromofluorobenzene	0.595	0.612	0.200	-2.8	30.0

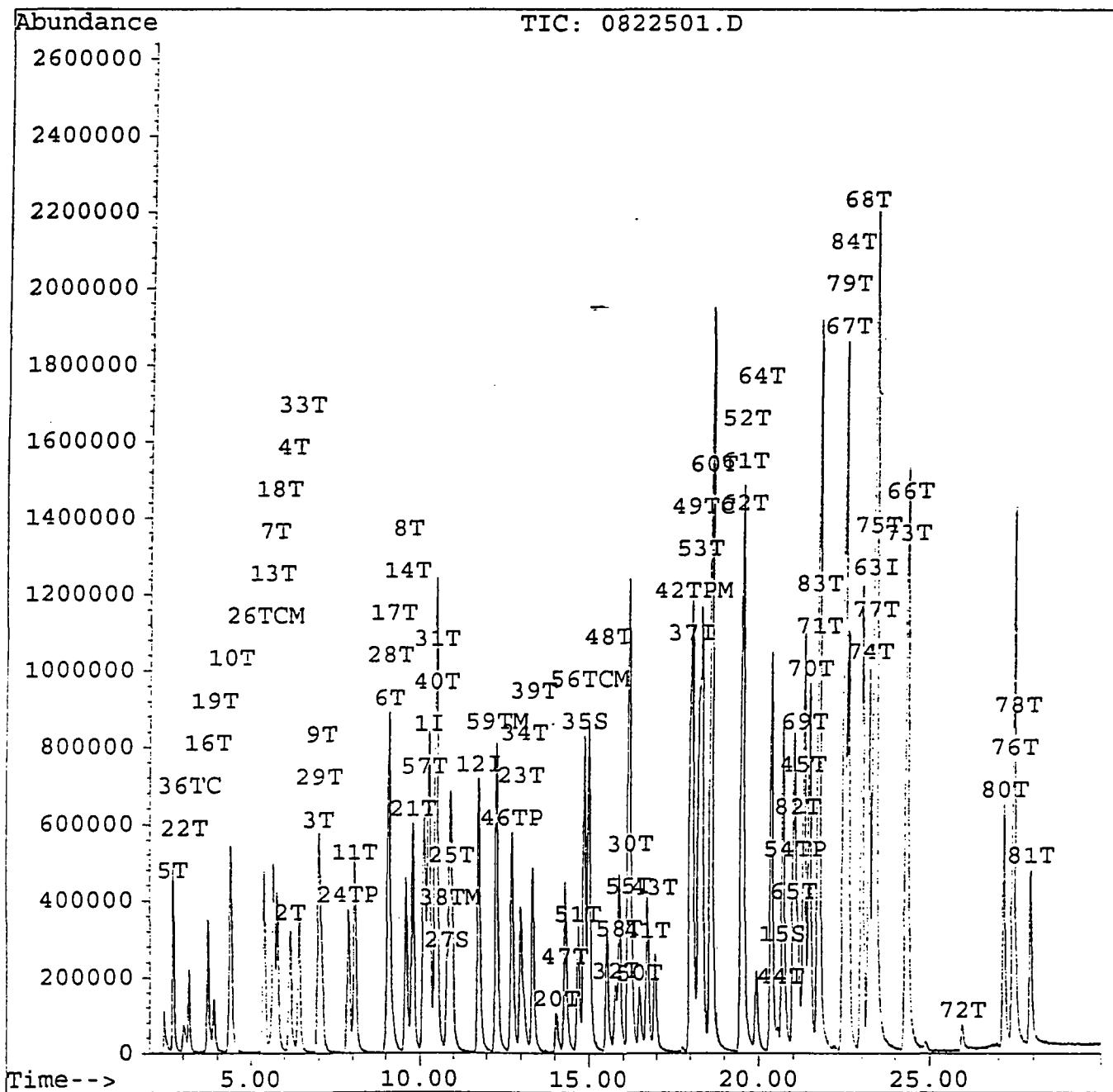
All other compounds must meet a minimum RRF of 0.010.

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822501.D  
 Acq On : 22 Aug 97 9:00 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 9:41 1997

Vial: 15  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822501.D  
 Acq On : 22 Aug 97 9:00 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 9:41 1997

Vial: 15  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.27	168	1608923	5.00	µg/L	0.02
12) 1,4-Difluorobenzene	11.76	114	1689907	5.00	µg/L	0.02
37) Chlorobenzene-d5	17.99	117	1393539	5.00	µg/L	-0.04
63) 1,4-Dichlorobenzene-d4	23.37	152	776245	5.00	µg/L	-0.09
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.69	95	1033688	5.14	µg/L	102.8
27) 1,2-Dichloroethane-d4	10.80	102	121034	5.65	µg/L	113.0
35) Toluene-d8	14.86	98	1650077	5.38	µg/L	100.68
<b>Target Compounds</b>						Qvalue
2) Acetonitrile	6.16	41	574475	6.56	µg/L	100
3) Acrylonitrile	6.98	53	37790	5.67	µg/L	# 53
4) Allyl chloride	6.15	76	239976	6.18	µg/L	99
5) Dichlorodifluoromethane	2.71	85	931175	5.92	µg/L	100
6) 2,2-Dichloropropane	9.07	77	1043150	5.65	µg/L	100
7) Iodomethane	5.68	142	1540744	6.14	µg/L	99
8) Methacrylonitrile	9.61	41	80700	6.45	µg/L	# 88
9) Methyl-tert-Butyl ether	7.07	73	732882	6.16	µg/L	99
10) Trichlorofluoromethane	4.38	101	1335537	6.83	µg/L	100
11) Vinyl acetate	8.05	43	312641	4.20	µg/L	98
13) Acetone	5.60	43	142718	27.86	µg/L	93
14) Bromochloromethane	9.58	128	343738	6.09	µg/L	97
16) Bromomethane	3.72	94	453207	5.97	µg/L	96
17) 2-Butanone	9.22	43	228261	26.84	µg/L	97
18) Carbon disulfide	5.79	76	1454652	6.22	µg/L	JP 96
19) Chloroethane	3.89	64	261929	7.43	µg/L	96
20) 2-Chloroethyl vinyl ether	14.03	63	161846	6.30	µg/L	94
21) Chloroform	9.80	83	1402315	6.02	µg/L	99
22) Chloromethane	3.02	50	290023	7.13	µg/L	96
23) Dibromomethane	12.98	93	457952	6.09	µg/L	100
24) 1,1-Dichloroethane	7.86	63	1044599	6.41	µg/L	99
25) 1,2-Dichloroethane	10.96	62	657544	6.02	µg/L	99
26) 1,1-Dichloroethene	5.40	96	539999	6.28	µg/L	98
28) cis-1,2-Dichloroethene	9.10	96	601324	6.02	µg/L	98
29) trans-1,2-Dichloroethene	6.98	96	578570	6.26	µg/L	99
30) 1,3-Dichloropropane	16.2	76	605362	6.25	µg/L	98
31) 1,1-Dichloropropene	10.47	75	917390	6.04	µg/L	100
32) Ethyl methacrylate	15.78	69	342746	5.92	µg/L	93
33) Methylene chloride	6.42	84	505262	6.58	µg/L	98
34) Methyl methacrylate	13.10	69	141235	5.97	µg/L	97
36) Vinyl chloride	3.18	62	394590	6.55	µg/L	98
38) Benzene	10.90	78	1564309	6.28	µg/L	100
39) Bromodichloromethane	13.34	83	945590	5.98	µg/L	99

(#) = qualifier out of range (m) = manual integration

0822501.D M691.M Fri Aug 22 13:17:28 1997 MSD5

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822501.D  
 Acq On : 22 Aug 97 9:00 am  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 9:41 1997

Vial: 15  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.47	117	1239198	5.76	µg/L	100
41) Chlorodibromomethane	16.72	129	613279	6.38	µg/L	99
42) Chlorobenzene	18.06	112	1531036	5.84	µg/L	97
43) 1,2-Dibromoethane	16.95	107	574343	5.78	µg/L	96
44) cis-1,4-Dichloro-2-butene	20.62	75	38931	2.80	µg/L m	52
45) trans-1,4-Dichloro-2-butene	21.26	53	51968	2.69	µg/L #	1
46) 1,2-Dichloropropane	12.74	63	602685	6.19	µg/L	100
47) cis-1,3-Dichloropropene	14.30	75	790710	5.56	µg/L	99
48) trans-1,3-Dichloropropene	15.51	75	573448	5.27	µg/L	96
49) Ethylbenzene	18.32	91	2371474	5.90	µg/L	100
50) 2-Hexanone	16.49	43	432700	25.62	µg/L	97
51) 4-Methyl-2-pentanone	14.68	43	804991	29.19	µg/L	98
52) Styrene	19.53	104	1356480	5.74	µg/L	98
53) 1,1,1,2-Tetrachloroethane	18.25	131	745998	5.61	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.06	83	480508	6.03	µg/L	99
55) Tetrachloroethene	16.16	164	845307	6.25	µg/L	99
56) Toluene	15.00	91	1911988	6.05	µg/L	100
57) 1,1,1-Trichloroethane	10.12	97	1308308	5.73	µg/L	99
58) 1,1,2-Trichloroethane	15.89	97	409418	5.92	µg/L	98
59) Trichloroethene	12.29	95	840331	5.72	µg/L	98
60) m,p-Xylene	18.60	106	1766586	11.72	µg/L	95
61) o-Xylene	19.48	106	848597	5.81	µg/L	97
62) Xylene (total)	19.48	106	848597	5.81	µg/L	97
64) Bromoform	19.92	173	292025	6.60	µg/L	97
65) Bromobenzene	21.00	156	692221	5.47	µg/L	98
66) n-Butylbenzene	24.34	91	2105058	5.89	µg/L	99
67) tert-Butylbenzene	22.48	119	2404186	5.45	µg/L	92
68) sec-Butylbenzene	22.99	105	2939923	5.84	µg/L	99
69) n-Propylbenzene	21.31	91	2760920	5.81	µg/L	100
70) 2-Chlorotoluene	21.46	91	1940082	5.87	µg/L	100
71) 4-Chlorotoluene	21.73	91	2152387	5.77	µg/L	99
72) 1,2-Dibromo-3-chloropropan	25.95	75	56335	5.30	µg/L	91
73) 1,2-Dichlorobenzene	24.29	146	1074337	5.53	µg/L	98
74) 1,3-Dichlorobenzene	23.22	146	1284598	5.61	µg/L	99
75) 1,4-Dichlorobenzene	23.44	146	1402925	5.82	µg/L	96
76) Hexachlorobutadiene	27.42	225	696625	5.56	µg/L	99
77) p-Isopropyltoluene	23.37	119	2215385	5.77	µg/L	99
78) Naphthalene	27.52	128	320611	4.17	µg/L	100
79) Pentachloroethane	22.49	167	388003	4.68	µg/L	98
80) 1,2,4-Trichlorobenzene	27.15	180	551514	5.06	µg/L	99
81) 1,2,3-Trichlorobenzene	27.91	180	404686	4.60	µg/L	97
82) 1,2,3-Trichloropropane	21.13	75	379982	6.15	µg/L	97
83) 1,3,5-Trimethylbenzene	21.74	105	1947676	5.72	µg/L	100
84) 1,2,4-Trimethylbenzene	22.60	105	1963981	5.65	µg/L	100

(#) = qualifier out of range (m) = manual integration

0822501.D M691.M Fri Aug 22 13:17:30 1997 MSD5

Page 2

7LCA  
LOW CONC. WATER VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC                          Method: SCW 10/92  
 Lab Code: IEA                              Case No.: 1364-226                          SDG No.: 08367  
 Instrument ID: MSDS                      Calibration Date: 08/29/97 Time: 20:58  
 Lab File ID: 0829E01M.D                Init. Calib. Date(s): 08/28/97                      08/28/97  
 Heated Purge: (Y/N) N                    Init. Calib. Times: 20:56                          23:59  
 GC Column: DB-624                        ID: .53 (mm)

COMPOUND	RRF	RRF05	MIN RRF	%D	MAX %D
Acetone	0.021	0.023		-7.8	
Benzene	1.107	1.193	0.500	-7.8	30.0
Bromochloromethane	0.188	0.197	0.050	-4.5	30.0
Bromodichloromethane	0.864	0.908	0.200	-5.1	30.0
Bromoform	0.469	0.433	0.050	7.6	30.0
Bromomethane	0.264	0.257	0.100	2.5	30.0
2-Butanone	0.036	0.040		-11.3	
Carbon Disulfide	0.839	0.855		-1.9	
Carbon Tetrachloride	0.910	0.997	0.100	-9.5	30.0
Chlorobenzene	1.043	1.088	0.500	-4.2	30.0
Chloroethane	0.128	0.125		2.0	
Chloroform	0.789	0.831	0.200	-5.3	30.0
Chloromethane	0.201	0.211		-5.1	
Dibromochloromethane	0.551	0.545	0.100	0.9	30.0
1,2-Dibromo-3-Chloropropane	0.130	0.109		16.4	
1,2-Dibromoethane	0.416	0.426	0.100	-2.4	30.0
1,2-Dichlorobenzene	1.384	1.446	0.400	-4.5	30.0
1,3-Dichlorobenzene	1.633	1.679	0.600	-2.8	30.0
1,4-Dichlorobenzene	1.747	1.841	0.500	-5.4	30.0
1,1-Dichloroethane	0.610	0.624	0.200	-2.3	30.0
1,2-Dichloroethane	0.386	0.417	0.100	-8.1	30.0
1,1-Dichloroethene	0.292	0.298	0.100	-1.8	30.0
Cis-1,2-Dichloroethene	0.341	0.346		-1.6	
Trans-1,2-Dichloroethene	0.309	0.323		-4.2	
1,2-Dichloropropane	0.467	0.505		-8.2	
Cis-1,3-Dichloropropene	0.621	0.671	0.200	-8.0	30.0
Trans-1,3-Dichloropropene	0.471	0.477	0.100	-1.3	30.0
Ethylbenzene	1.678	1.721	0.100	-2.6	30.0
2-Hexanone	0.090	0.096		-6.5	
Methylene Chloride	0.272	0.284		-4.6	
4-Methyl-2-Pentanone	0.155	0.169		-8.9	
Styrene	0.949	0.962	0.300	-1.3	30.0
1,1,2,2-Tetrachloroethane	0.364	0.355	0.100	2.5	30.0
Tetrachloroethene	0.503	0.553	0.200	-9.8	30.0
Toluene	1.336	1.120	0.400	-6.3	30.0
1,1,1-Trichloroethane	0.935	1.039	0.100	-11.0	30.0
1,1,2-Trichloroethane	0.293	0.301	0.100	-2.6	30.0

All other compounds must meet a minimum RRF of 0.010.

7LCA  
LOW CONC. WATER VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC                          Method: SOW 10/92  
Lab Code: IEA                              Case No.: 1364-226                          SDG No.: 08367  
Instrument ID: MSD5                      Calibration Date: 08/29/97 Time: 20:58  
Lab File ID: 0829E01M.D                Init. Calib. Date(s): 08/28/97                    08/28/97  
Heated Purge: (Y/N) N                    Init. Calib. Times: 20:56                        23:59  
GC Column: DB-624                        ID: .53 (mm)

COMPOUND	RRF	RRF05	MIN RRF	%D	MAX %D
Trichloroethene	0.606	0.651	0.300	-7.5	30.0
Vinyl Chloride	0.239	0.252	0.100	-5.1	30.0
Xylene (Total)	0.576	0.599	0.300	-4.0	30.0
4-Bromofluorobenzene	0.601	0.568	0.200	5.4	30.0

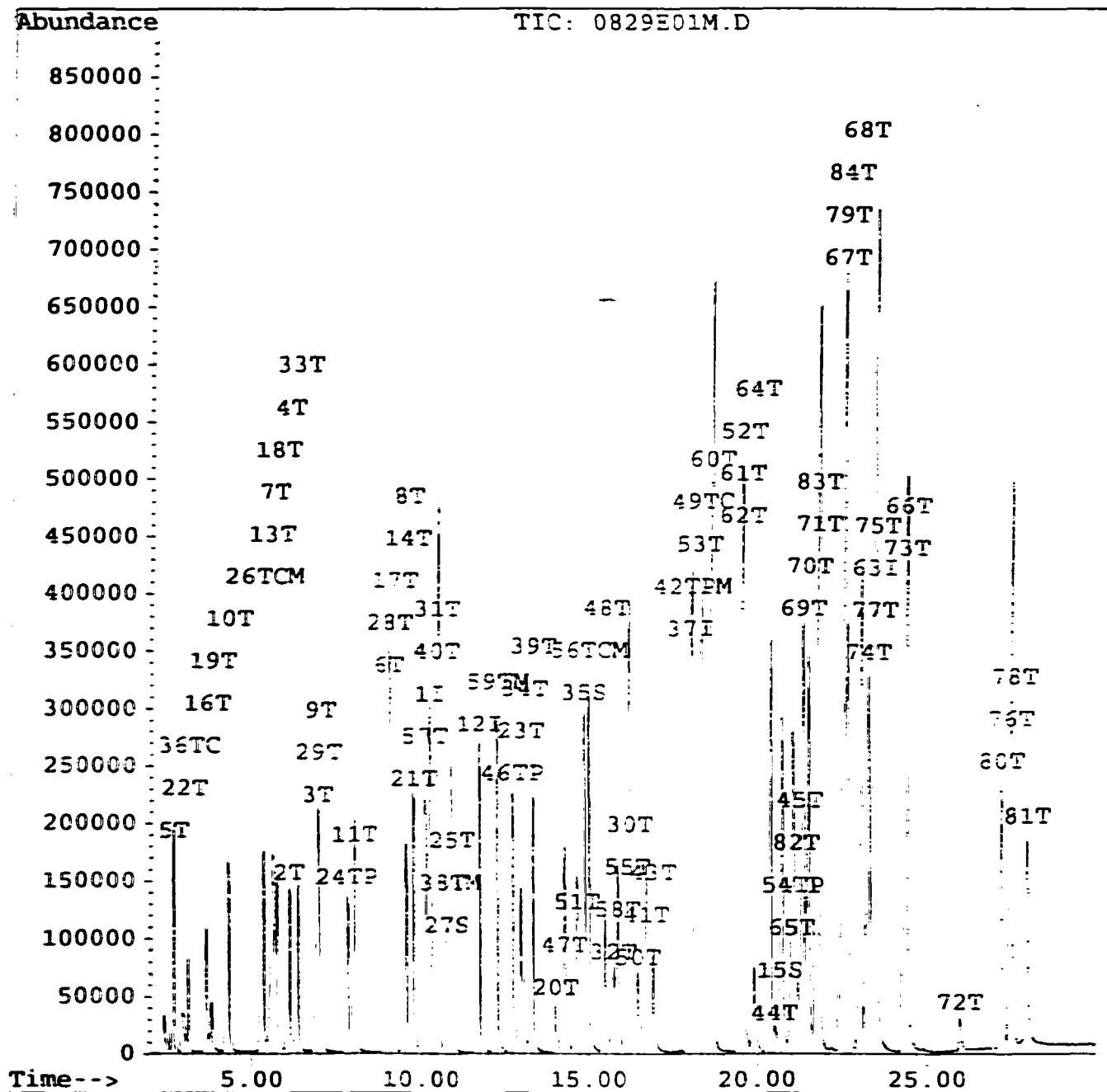
All other compounds must meet a minimum RRF of 0.010.

**Quantitation Report**

**Data File :** C:\HPCHEM\1\DATA\970829E.B\0829E01M.D  
**Acq On :** 29 Aug 97 8:58 pm  
**Sample :** VSTD005 IEA MSD5  
**Misc :** WATER LOW 1X  
**Quant Time:** Aug 29 22:28 1997

**Vial:** 16  
**Operator:** CREWES  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** C:\HPCHEM\1\DATA\9708295.B\M691.M  
**Title :** 6/91 IEA MSD5  
**Last Update :** Fri Aug 29 22:44:26 1997  
**Response via :** Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\970829E.B\0829E01M.D  
 Acq On : 29 Aug 97 8:58 pm  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 22:28 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708295.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 22:44:26 1997  
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.20	168	573026	5.00	µg/L	0.01
12) 1,4-Difluorobenzene	11.69	114	631344	5.00	µg/L	0.00
37) Chlorobenzene-d5	17.94	117	471839	5.00	µg/L	-0.04
63) 1,4-Dichlorobenzene-d4	23.37	152	247218	5.00	µg/L	0.00
<b>System Monitoring Compounds</b>						<b>%Recovery:</b>
15) 4-Bromofluorobenzene	20.66	95	358809	4.73	µg/L	94.62%
27) 1,2-Dichloroethane-d4	10.74	102	42146	5.39	µg/L	107.77%
35) Toluene-d8	14.79	98	601939	4.94	µg/L	98.85%
<b>Target Compounds</b>						<b>Qvalue</b>
2) Acetonitrile	6.06	41	282115	5.53	µg/L	100
3) Acrylonitrile	6.88	53	14061	4.54	µg/L	# 85
4) Allyl chloride	6.07	76	91130	5.00	µg/L	98
5) Dichlorodifluoromethane	2.67	85	400038	5.27	µg/L	100
6) 2,2-Dichloropropane	8.98	77	419175	5.10	µg/L	100
7) Iodomethane	5.57	142	548229	5.38	µg/L	99
8) Methacrylonitrile	9.55	41	35531	4.31	µg/L	# 88
9) Methyl-tert-Butyl ether	6.98	73	285055	5.15	µg/L	98
10) Trichlorofluoromethane	4.30	101	422685	5.85	µg/L	99
11) Vinyl acetate	7.99	43	208309	4.59	µg/L	99
13) Acetone	5.49	43	72518	26.96	µg/L	99
14) Bromochloromethane	9.51	128	124079	5.23	µg/L	98
16) Bromomethane	3.65	94	162444	4.88	µg/L	93
17) 2-Butanone	9.15	43	126957	27.83	µg/L	93
18) Carbon disulfide	5.70	76	539600	5.10	µg/L	99
19) Chloroethane	3.82	64	78962	4.90	µg/L	99
20) 2-Chloroethyl vinyl ether	13.98	63	64496	5.15	µg/L	100
21) Chloroform	9.72	83	524547	5.26	µg/L	98
22) Chloromethane	2.97	50	133075	5.25	µg/L	98
23) Dibromomethane	12.92	93	179520	5.27	µg/L	99
24) 1,1-Dichloroethane	7.78	63	394033	5.11	µg/L	99
25) 1,2-Dichloroethane	10.89	62	263375	5.40	µg/L	99
26) 1,1-Dichloroethene	5.30	96	187846	5.09	µg/L	98
28) cis-1,2-Dichloroethene	9.01	96	218719	5.08	µg/L	96
29) trans-1,2-Dichloroethene	6.90	96	203629	5.21	µg/L	100
30) 1,3-Dichloropropane	16.19	76	217954	4.98	µg/L	95
31) 1,1-Dichloropropene	10.41	75	357576	5.23	µg/L	100
32) Ethyl methacrylate	15.73	69	125627	4.30	µg/L	92
33) Methylene chloride	6.32	84	179521	5.23	µg/L	98
34) Methyl methacrylate	13.03	69	50501	4.15	µg/L	90
36) Vinyl chloride	3.12	62	158809	5.26	µg/L	96
38) Benzene	10.83	78	563127	5.39	µg/L	100
39) Bromodichloromethane	13.27	83	428625	5.26	µg/L	99

(#) = qualifier out of range (m) = manual integration

0829E01M.D M691.M Fri Aug 29 22:44:39 1997

MSD5

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\970829E.B\0829E01M.D  
 Acq On : 29 Aug 97 8:58 pm  
 Sample : VSTD005 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 22:28 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708295.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 22:44:26 1997  
 Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.39	117	470575	5.48	µg/L	98
41) Chlorodibromomethane	16.67	129	257289	4.95	µg/L	99
42) Chlorobenzene	18.02	112	513127	5.21	µg/L	99
43) 1,2-Dibromoethane	16.90	107	201029	5.12	µg/L	97
44) cis-1,4-Dichloro-2-butene	20.52	75	11509	1.77	µg/L	#
45) trans-1,4-Dichloro-2-butene	21.20	53	17974	1.80	µg/L	#
46) 1,2-Dichloropropane	12.67	63	238227	5.41	µg/L	98
47) cis-1,3-Dichloropropene	14.23	75	316557	5.40	µg/L	98
48) trans-1,3-Dichloropropene	15.46	75	225220	5.06	µg/L	98
49) Ethylbenzene	18.29	91	812194	5.13	µg/L	100
50) 2-Hexanone	16.44	43	227041	26.63	µg/L	98
51) 4-Methyl-2-pentanone	14.60	43	397822	27.23	µg/L	98
52) Styrene	19.50	104	453745	5.07	µg/L	99
53) 1,1,1,2-Tetrachloroethane	18.20	131	265269	5.19	µg/L	98
54) 1,1,2,2-Tetrachloroethane	21.03	83	167436	4.88	µg/L	97
55) Tetrachloroethene	16.11	164	260763	5.49	µg/L	99
56) Toluene	14.93	91	670054	5.31	µg/L	99
57) 1,1,1-Trichloroethane	10.05	97	490146	5.55	µg/L	98
58) 1,1,2-Trichloroethane	15.83	97	141981	5.13	µg/L	99
59) Trichloroethene	12.22	95	307085	5.37	µg/L	98
60) m,p-Xylene	18.57	106	593031	10.39	µg/L	97
61) o-Xylene	19.44	106	282639	5.20	µg/L	98
62) Xylene (total)	19.44	106	282639	5.20	µg/L	98
64) Bromoform	19.88	173	107141	4.62	µg/L	#
65) Bromobenzene	20.97	156	244545	5.28	µg/L	98
66) n-Butylbenzene	24.34	91	692982	4.83	µg/L	98
67) tert-Butylbenzene	22.47	119	837177	5.02	µg/L	98
68) sec-Butylbenzene	22.99	105	985879	4.97	µg/L	100
69) n-Propylbenzene	21.30	91	976628	5.07	µg/L	98
70) 2-Chlorotoluene	21.44	91	648196	4.81	µg/L	99
71) 4-Chlorotoluene	21.71	91	750029	5.00	µg/L	98
72) 1,2-Dibromo-3-chloropropan	25.94	75	26880	4.18	µg/L	98
73) 1,2-Dichlorobenzene	24.29	146	357440	5.22	µg/L	99
74) 1,3-Dichlorobenzene	23.21	146	415096	5.14	µg/L	98
75) 1,4-Dichlorobenzene	23.43	146	455065	5.27	µg/L	97
76) Hexachlorobutadiene	27.45	225	240449	5.32	µg/L	99
77) p-Isopropyltoluene	23.37	119	73'849	5.07	µg/L	98
78) Naphthalene	27.53	128	127030	4.46	µg/L	100
79) Pentachloroethane	22.48	167	151194	4.88	µg/L	98
80) 1,2,4-Trichlorobenzene	27.16	180	201832	5.03	µg/L	98
81) 1,2,3-Trichlorobenzene	27.92	180	160716	4.99	µg/L	98
82) 1,2,3-Trichloropropane	21.11	75	137636	5.03	µg/L	# 100
83) 1,3,5-Trimethylbenzene	21.72	105	696336	5.14	µg/L	98
84) 1,2,4-Trimethylbenzene	22.59	105	674720	5.01	µg/L	98

(#) = qualifier out of range (m) = manual integration

0829E01M.D M691.M Fri Aug 29 22:44:41 1997

MSD5

Page 2

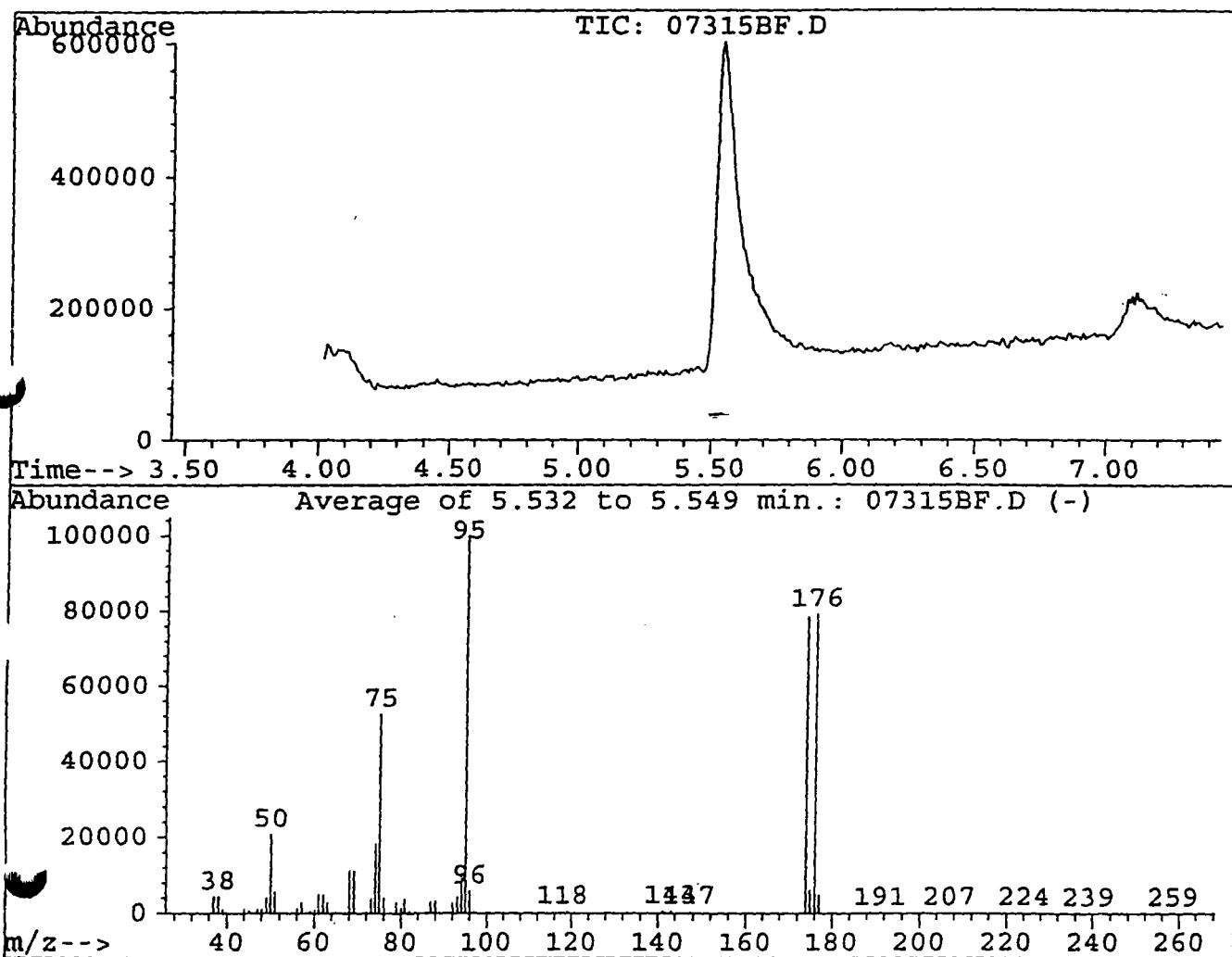
BFB 1/91

M691 Curve

Data File : C:\HPCHEM\1\DATA\9707315.B\07315BF.D  
 Acq On : 31 Jul 97 7:25 am  
 Sample : BFB TUNE 50NG IEA MSD5  
 Misc : WATER LOW 1X

Vial: 1  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9707315.B\CLPBFB.M  
 Title : BFB TUNE METHOD



Peak Apex is scan: 182

Average of 3 scans: 181,182,183 minus background scan 171

@ M691

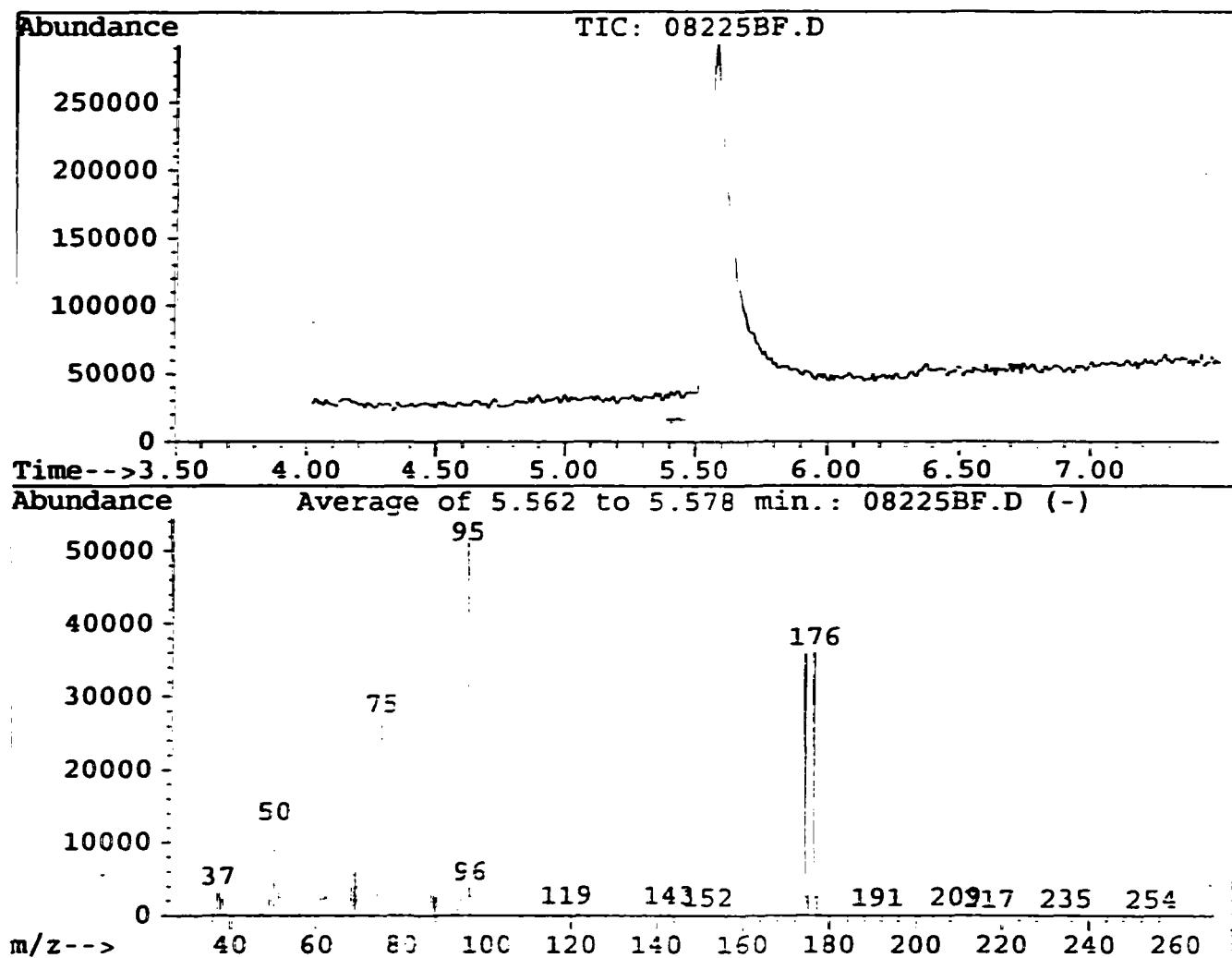
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
50	95	8	40	20.9	20903	PASS
75	95	30	66	52.6	52656	PASS
95	95	100	100	100.0	100160	PASS
96	95	5	9	5.9	5914	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	78.4	78528	PASS
175	174	4	9	8.1	6322	PASS
176	174	93	101	101.0	79308	PASS
177	176	5	9	6.3	4975	PASS

BFB 1/91

Data File : C:\HPCHEM\1\DATA\9708225.B\08225BF.D  
 Acq On : 22 Aug 97 8:19 am  
 Sample : BFB TUNE 50NG IEA MSD5  
 Misc : WATER LOW 1X

Vial: 15  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\CLPBFB.M  
 Title : BFB TUNE METHOD



Peak Apex is scan: 187

Average of 3 scans: 186,187,188 minus background scan 178

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
50	95	8	40	23.3	12085	PASS
75	95	30	66	51.7	26868	PASS
95	95	100	100	100.0	51968	PASS
96	95	5	9	7.5	3878	PASS
173	174	0	2	0.7	266	PASS
174	95	50	120	69.1	35933	PASS
175	174	4	9	7.6	2744	PASS
176	174	93	101	100.4	36059	PASS
177	176	5	9	7.5	2688	PASS

BFB 1/91

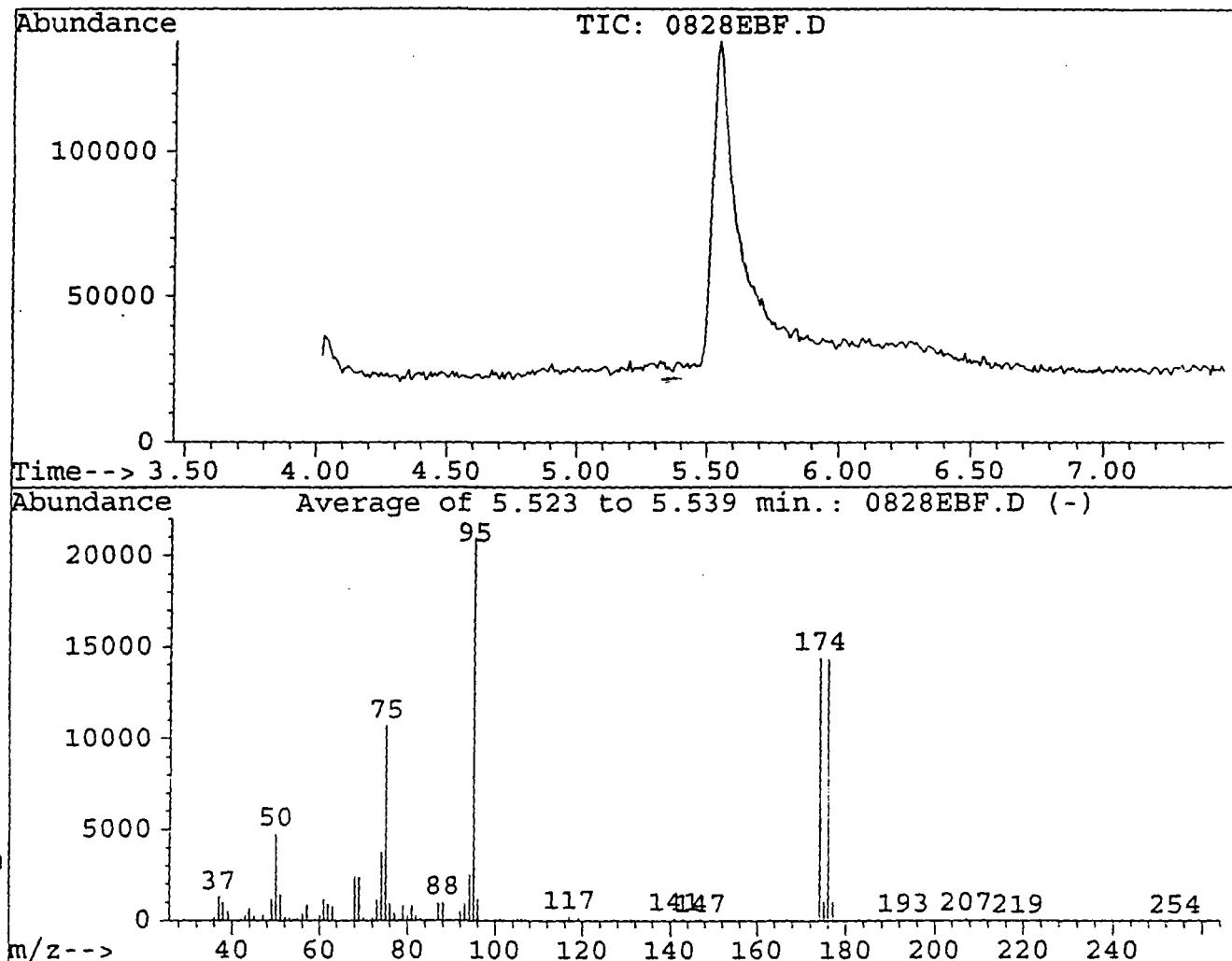
M691

6/91 &amp; 10/92 Curve

Data File : C:\HPCHEM\1\DATA\970828E.B\0828EBF.D  
 Acq On : 28 Aug 97 8:21 pm  
 Sample : BFB TUNE 50ng IEA MSD5  
 Misc : WATER LOW 1X

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970828E.B\CLPBFB.M  
 Title : BFB TUNE METHOD



Peak Apex is scan: 183

Average of 3 scans: 182,183,184 minus background scan 174

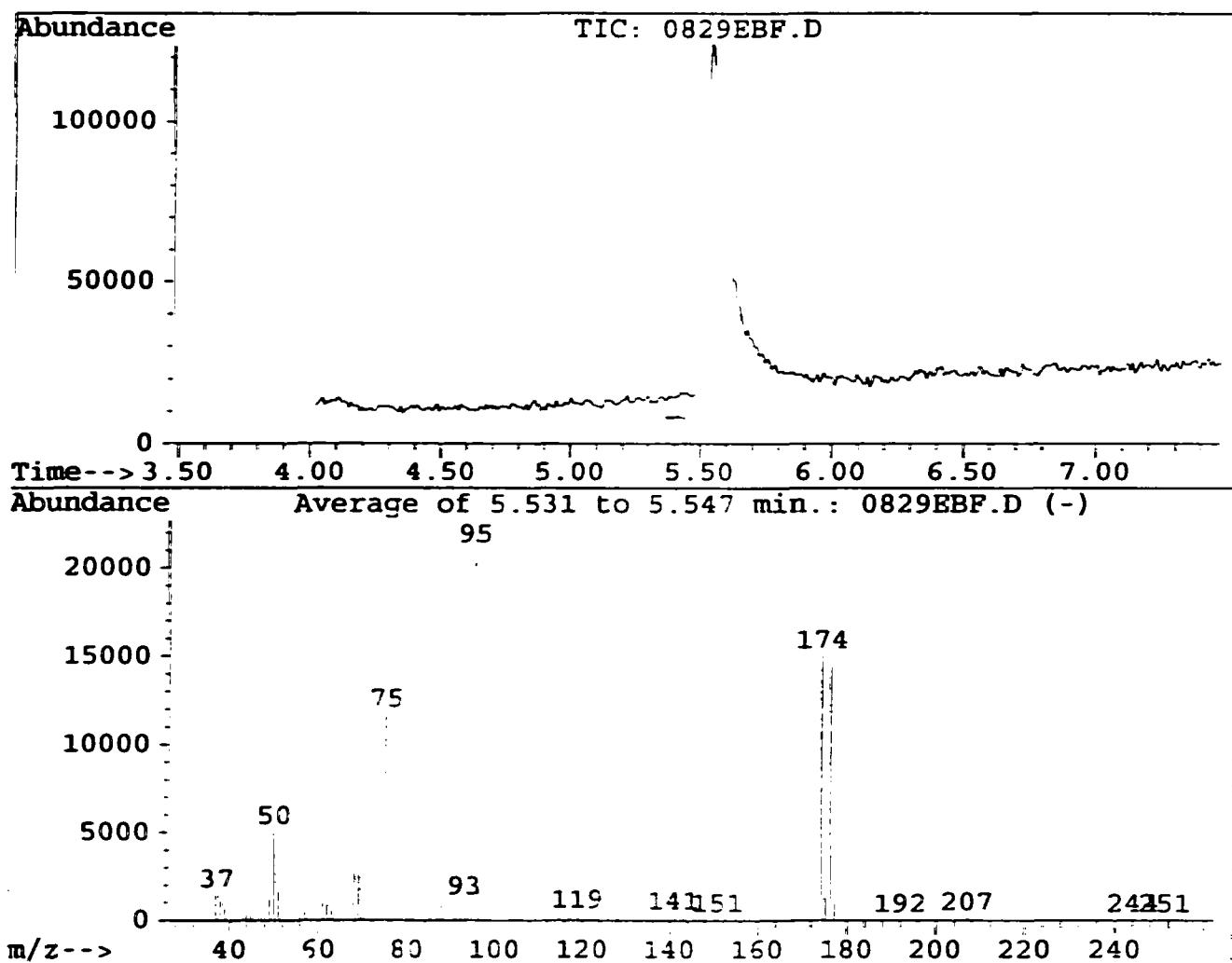
(V:Nd/4/97)

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
50	95	8	40	22.9/-	4806	PASS
75	95	30	66	51.0/-	10712	PASS
95	95	100	100	100.0/-	21005	PASS
96	95	5	9	5.8/-	1226	PASS
173	174	0	2	0.5/-	78	PASS
174	95	50	120	68.8/-	14453	PASS
175	174	4	9	7.3/-	1054	PASS
176	174	93	101	99.6/-	14391	PASS
177	176	5	9	7.4/-	1063	PASS

Data File : C:\HPCHEM\1\DATA\970829E.B\0829EBF.D  
 Acq On : 29 Aug 97 8:23 pm  
 Sample : BFB TUNE 50ng IEA MSD5  
 Misc : WATER LOW 1X

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970829E.B\CLPBFB.M  
 Title : BFB TUNE METHOD



Peak Apex is scan: 185

Average of 3 scans: 184,185,186 minus background scan 177

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
50	95	8	40	23.5	5087	PASS
75	95	30	66	53.9	11688	PASS
95	95	100	100	100.0	21680	PASS
96	95	5	9	7.8	1687	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	69.3	15025	PASS
175	174	4	9	8.5	1277	PASS
176	174	93	101	96.2	14458	PASS
177	176	5	9	6.9	992	PASS

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822503.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l Q

67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	Cis-1,2-Dichloroethene	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

ILCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK5T

Lab Name: IEA-NC	Method: SOW 10/92	
Lab Code: IEA	Case No.: 1364-226	SDG No.: 08367
Matrix: (soil/water) WATER	Lab Sample ID: VBLK5T	
Sample wt/vol: 25 (g/mL) mL	Lab File ID: 0822503.D	
Level: (low/med) LOW	Date Received:	
% Moisture: not dec.	Date Analyzed: 08/22/97	
GC Column: DB-624 ID: .53 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		ug/l	Q
		1	U		
108-88-3	Toluene			1	U
71-55-6	1,1,1-Trichloroethane			1	U
79-00-5	1,1,2-Trichloroethane			1	U
79-01-6	Trichloroethene			1	U
75-01-4	Vinyl Chloride			1	U
1330-20-7	Xylene (Total)			5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

Lab Name: IEA-NC

Method: SOW 10/92

VBLK5T

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK5T

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822503.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

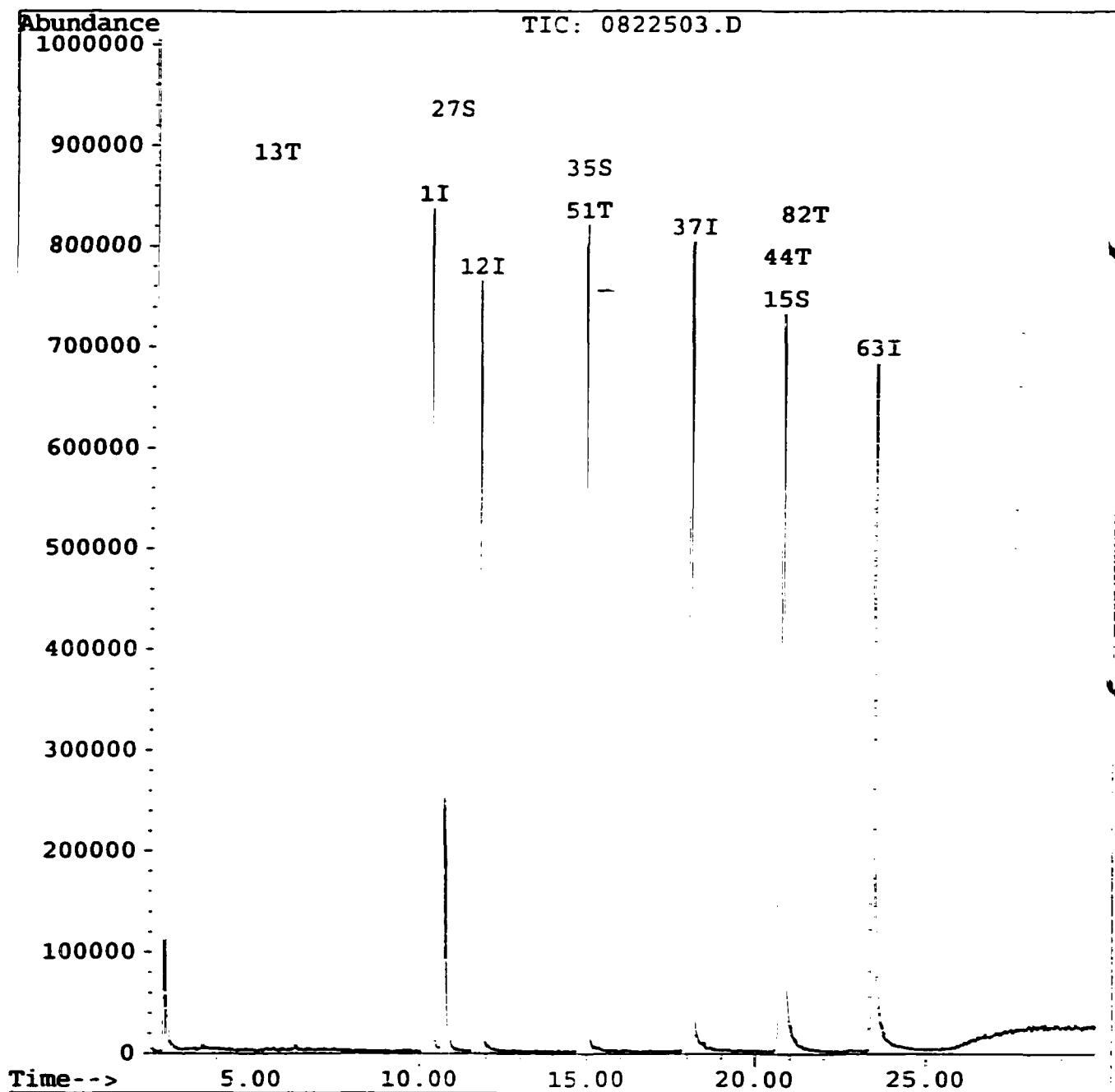
CONCENTRATION UNITS:  
(ug/L or ug/Kg)      ug/l

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822503.D  
Acq On : 22 Aug 97 10:52 am  
Sample : VBLK5T IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 22 11:23 1997

Vial: 15  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822503.D  
 Acq On : 22 Aug 97 10:52 am  
 Sample : VBLK5T IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 11:23 1997

Vial: 15  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(%)
1) Pentafluorobenzene	10.20	168	1723011	5.00	µg/L	-0
12) 1,4-Difluorobenzene	11.70	114	1876517	5.00	µg/L	-0
37) Chlorobenzene-d5	17.98	117	1506296	5.00	µg/L	-0
63) 1,4-Dichlorobenzene-d4	23.42	152	698365	5.00	µg/L	0
<b>System Monitoring Compounds</b>						% Recovery
15) 4-Bromofluorobenzene	20.70	95	1068498	4.65	µg/L	91
27) 1,2-Dichloroethane-d4	10.75	102	119609	4.45	µg/L	89
35) Toluene-d8	14.82	98	1760812	4.80	µg/L	91
<b>Target Compounds</b>						Qual.
13) Acetone	5.53	43	1117	0.18	µg/L	#
44) cis-1,4-Dichloro-2-butene	20.70	75	576082	34.22	µg/L	#
51) 4-Methyl-2-pentanone	14.82	43	9517	0.27	µg/L	#
82) 1,2,3-Trichloropropane	21.19	75	7134	0.10	µg/L	#

Halka

(##) = qualifier out of range (m) = manual integration

0822503.D M691.M Fri Aug 22 11:23:39 1997 MSD5

Page

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l		Q
		5	U	
67-64-1	Acetone	5	U	
71-43-2	Benzene	1	U	
74-97-5	Bromochloromethane	1	U	
75-27-4	Bromodichloromethane	1	U	
75-25-2	Bromoform	1	U	
74-83-9	Bromomethane	1	U	
78-93-3	2-Butanone	5	U	
75-15-0	Carbon Disulfide	1	U	
56-23-5	Carbon Tetrachloride	1	U	
108-90-7	Chlorobenzene	1	U	
75-00-3	Chloroethane	1	U	
67-66-3	Chloroform	1	U	
74-87-3	Chloromethane	1	U	
124-48-1	Dibromochloromethane	1	U	
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	
106-93-4	1,2-Dibromoethane	1	U	
95-50-1	1,2-Dichlorobenzene	1	U	
541-73-1	1,3-Dichlorobenzene	1	U	
106-46-7	1,4-Dichlorobenzene	1	U	
75-34-3	1,1-Dichloroethane	1	U	
107-06-2	1,2-Dichloroethane	1	U	
75-35-4	1,1-Dichloroethene	1	U	
156-59-2	Cis-1,2-Dichloroethene	1	U	
156-60-5	Trans-1,2-Dichloroethene	1	U	
78-87-5	1,2-Dichloropropane	1	U	
10061-01-5	Cis-1,3-Dichloropropene	1	U	
10061-02-6	Trans-1,3-Dichloropropene	1	U	
100-41-4	Ethylbenzene	1	U	
591-78-6	2-Hexanone	5	U	
75-09-2	Methylene Chloride	1	U	
108-10-1	4-Methyl-2-Pentanone	5	U	
100-42-5	Styrene	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	U	
127-18-4	Tetrachloroethene	1	U	

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLK51

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

Lab Name: IEA-NC

**Method:** SOW 10/92

VBLK51

Lab Code : IEA

**Case No. : 364-226**

**SDG No. : 08367**

**Matrix: (soil/water)    WATER**

Lab Sample ID: VBLK51

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E02M.D

Level: (low/med) LOW

**Date Received:**

• Moisture: not dec.

Date Analyzed: 08/29/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

**Number TICs Found:** 0

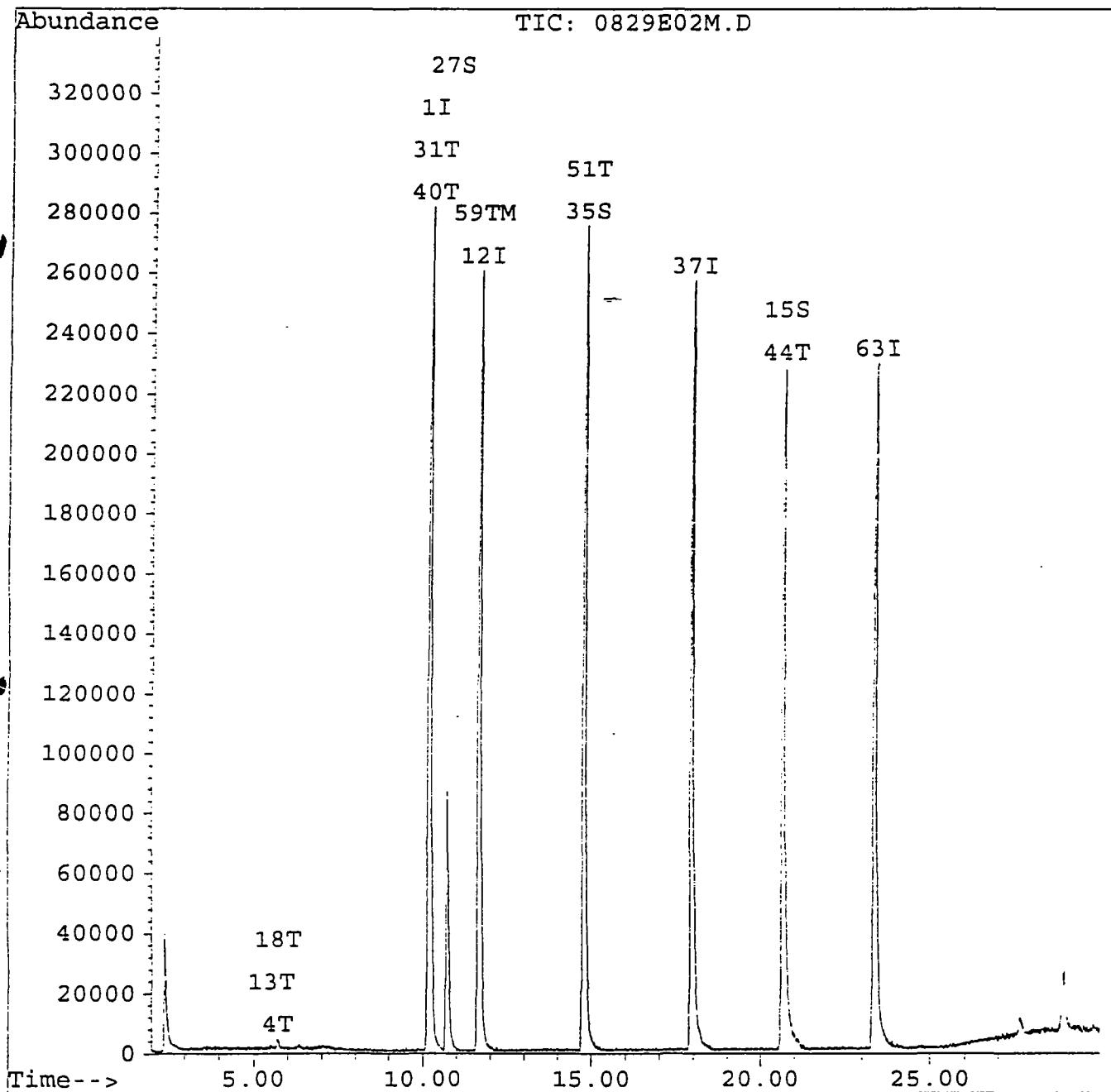
**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

# Quantitation Report

Data File : C:\HPCHEM\1\DATA\970829E.B\0829E02M.D  
Acq On : 29 Aug 97 9:57 pm  
Sample : VBLK51 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 29 22:48 1997

Vial: 16  
Operator: CREWES  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970829E.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 29 09:55:20 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\970829E.B\0829E02M.D  
 Acq On : 29 Aug 97 9:57 pm  
 Sample : VBLK51 IEA MSDS  
 Misc : WATER LOW 1X  
 Quant Time: Aug 29 22:48 1997

Vial: 16  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970829E.B\M691.M  
 Title : 6/91 IEA MSDS  
 Last Update : Fri Aug 29 09:55:20 1997  
 Response via : Continuing Calibration

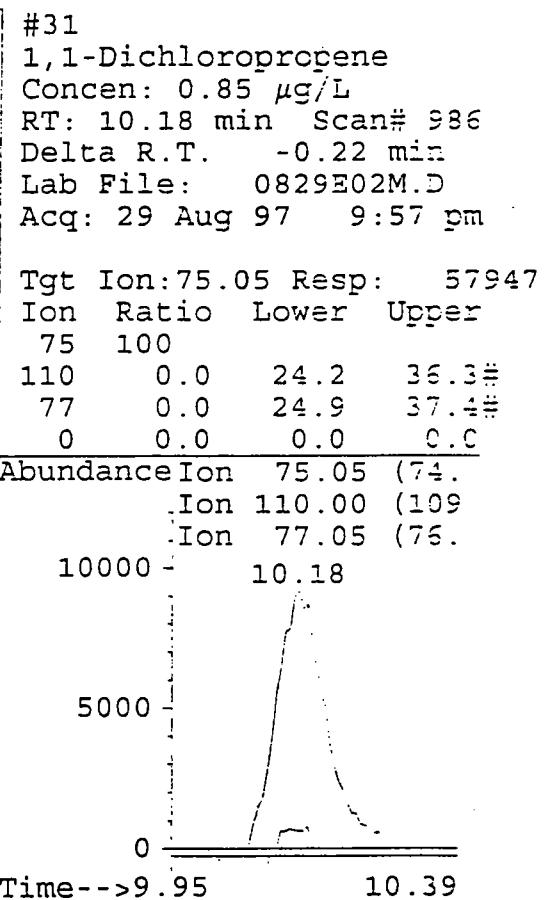
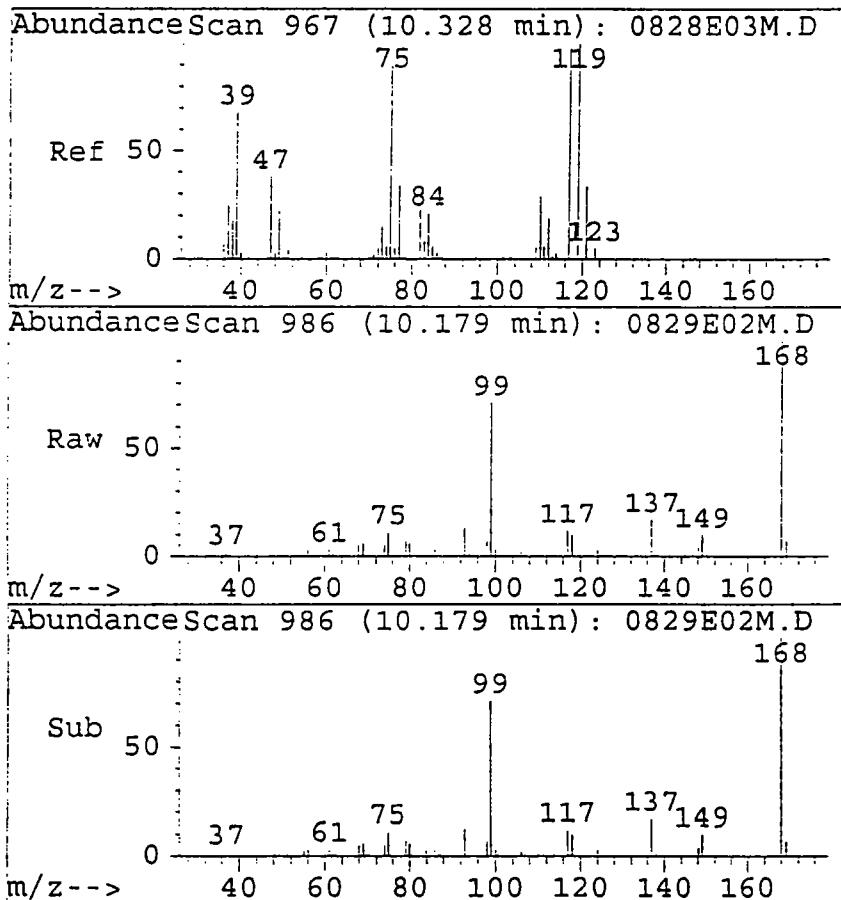
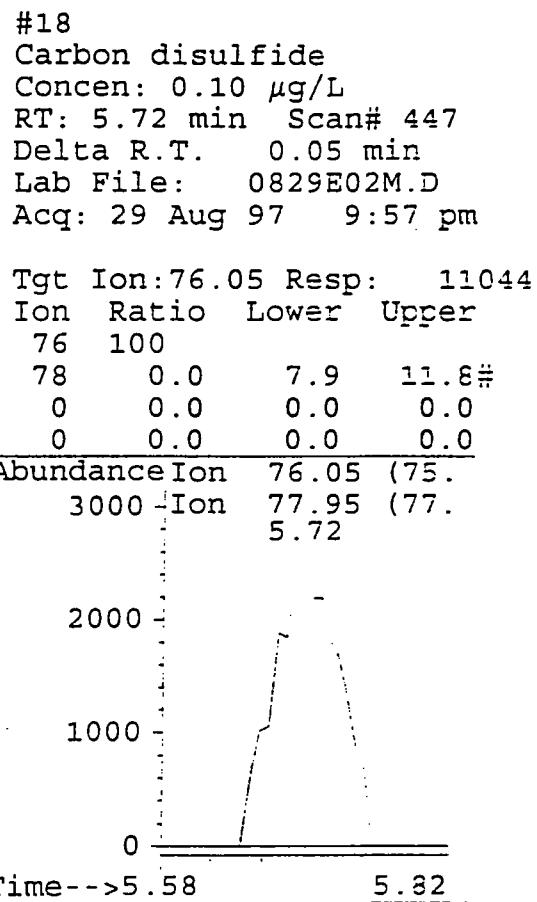
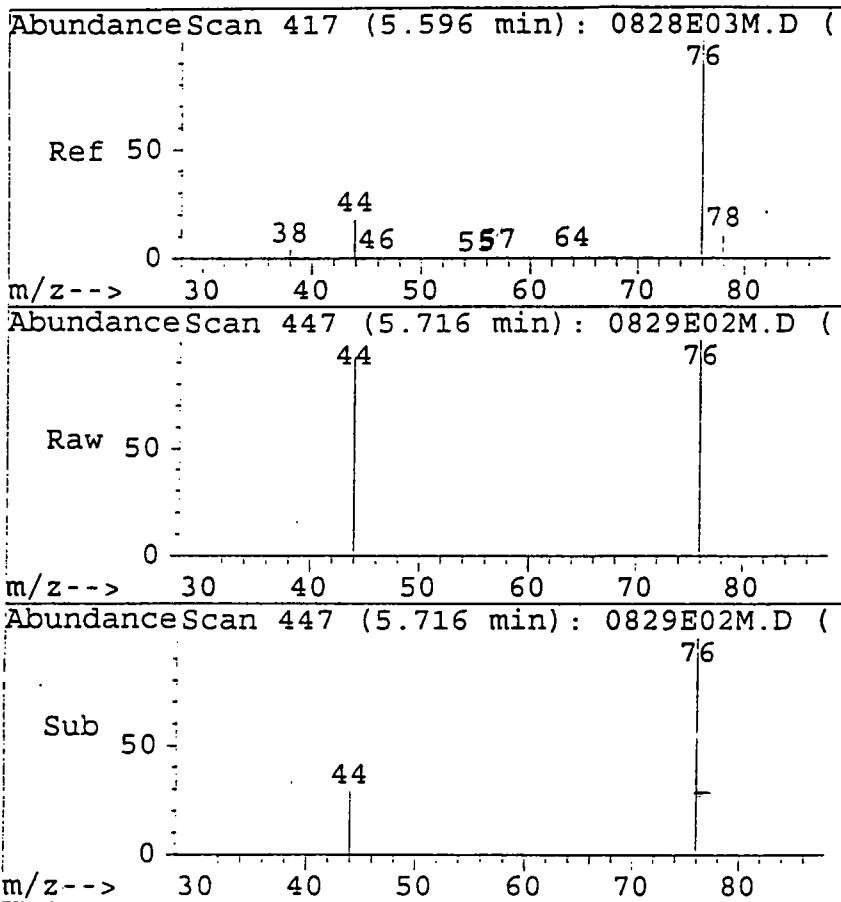
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min.)
1) Pentafluorobenzene	10.18	168	573292	5.00	µg/L	-0.01
12) 1,4-Difluorobenzene	11.68	114	612383	5.00	µg/L	-0.01
37) Chlorobenzene-d5	17.94	117	459923	5.00	µg/L	-0.04
63) 1,4-Dichlorobenzene-d4	23.35	152	222725	5.00	µg/L	-0.02
<b>System Monitoring Compounds</b>						% Recovery
15) 4-Bromoefluorobenzene	20.66	95	343184	4.89	µg/L	97.75%
27) 1,2-Dichloroethane-d4	10.73	102	36028	4.56	µg/L	91.15%
35) Toluene-d8	14.77	98	587711	5.02	µg/L	100.66%
<b>Target Compounds</b>						Qvalue
4) Allyl chloride	5.72	75	11044	0.61	µg/L	NT
13) Acetone	5.52	43	1415	0.54	µg/L	Lmol 55
18) Carbon disulfide	5.72	76	11044	0.10	µg/L	FP 73
31) 1,1-Dichloropropene	10.18	75	57947	0.85	µg/L	NT 44
40) Carbon tetrachloride	10.18	117	62491	0.71	µg/L	FP 2
44) cis-1,4-Dichloro-2-butene	20.65	75	187930	36.01	µg/L	NT 47
51) 4-Methyl-2-pentanone	14.78	43	3400	0.25	µg/L	Lmol 1
59) Trichloroethene	11.68	95	18126	0.31	µg/L	FP 3

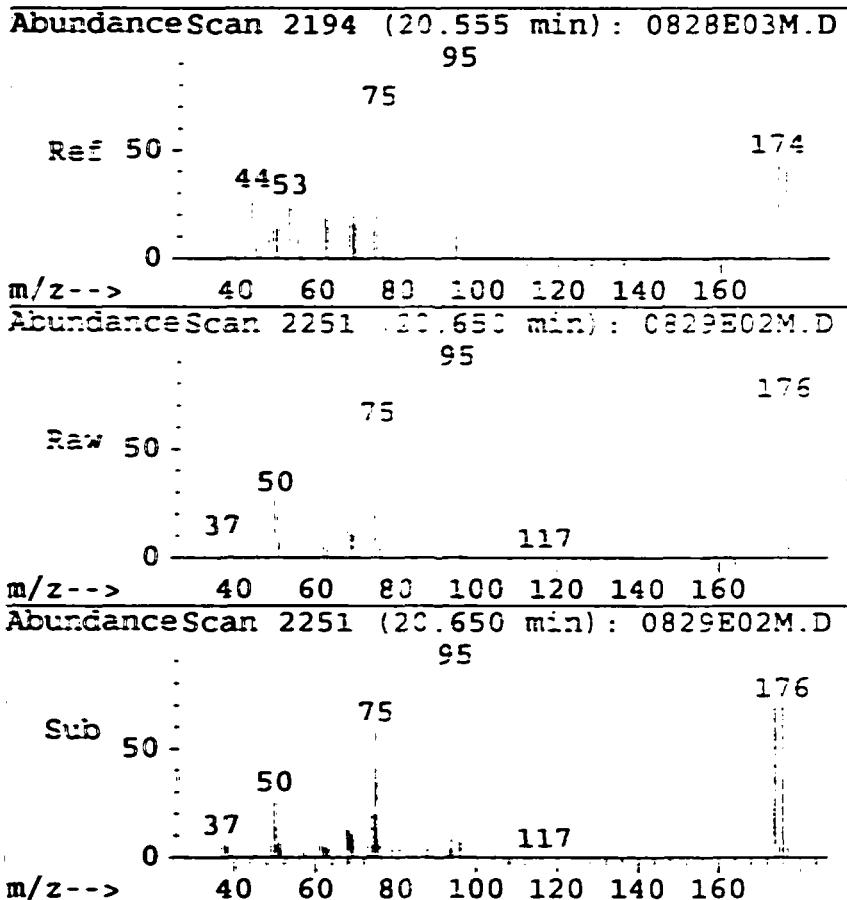
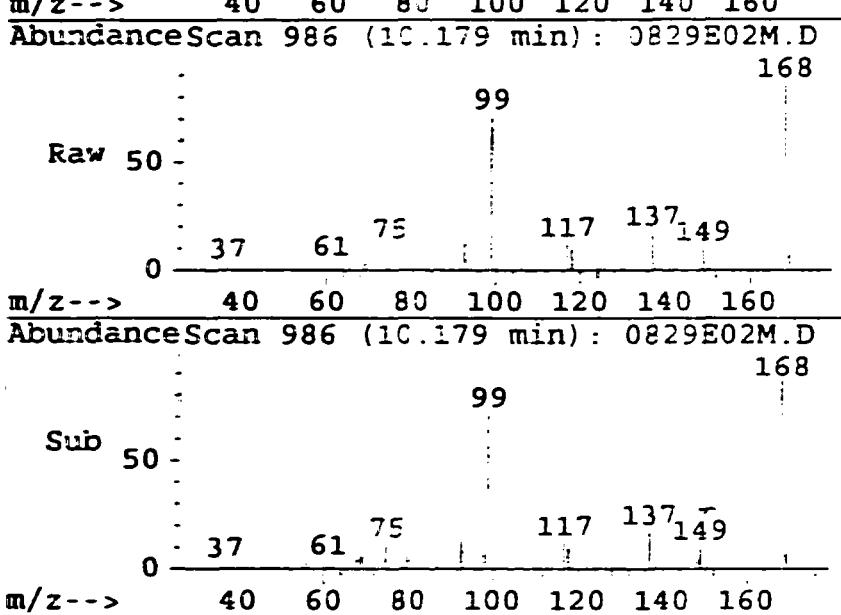
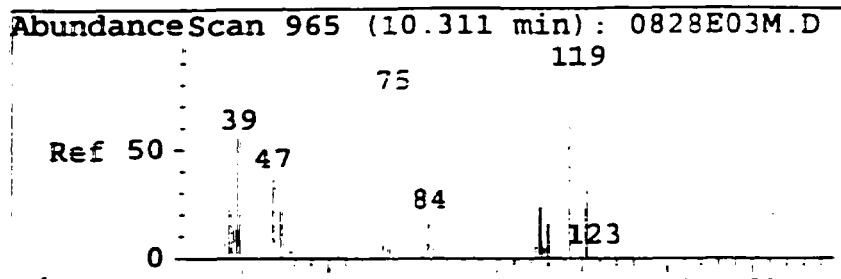
At9619^n

(##) = qualifier out of range (m) = manual integration

0829E02M.D M691.M Fri Aug 29 22:48:26 1997 MSD5

Page 1





#40  
 Carbon tetrachloride  
 Concen: 0.71 µg/L  
 RT: 10.18 min Scan# 986  
 Delta R.T. -0.21 min  
 Lab File: 0829E02M.D  
 Acq: 29 Aug 97 9:57 pm

Tgt Ion:117 Resp: 62491  
 Ion Ratio Lower Upper  
 117 100  
 119 0.0 77.3 115.9#  
 0 0.0 0.0 0.0  
 0 0.0 0.0 0.0

Abundance Ion 117.00 (116  
 Ion 119.00 (118  
 10.18

10000-

5000-

0

Time-->9.95 10.40

#44  
 cis-1,4-Dichloro-2-butene  
 Concen: 36.01 µg/L  
 RT: 20.65 min Scan# 2251  
 Delta R.T. 0.04 min  
 Lab File: 0829E02M.D  
 Acq: 29 Aug 97 9:57 pm

Tgt Ion:75.1 Resp: 187930  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 26.5 39.7#  
 77 0.0 16.1 24.2#  
 89 0.0 0.1 0.1#

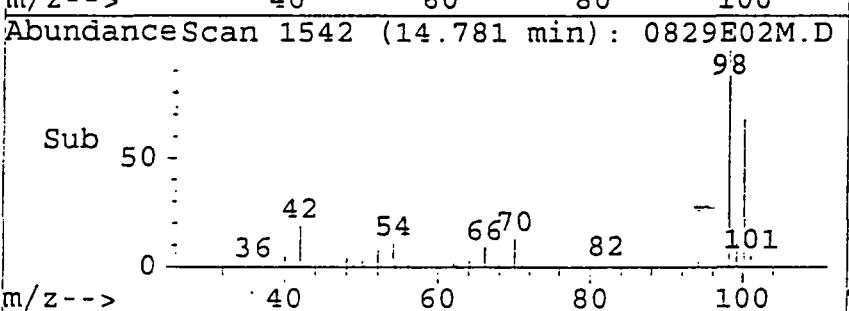
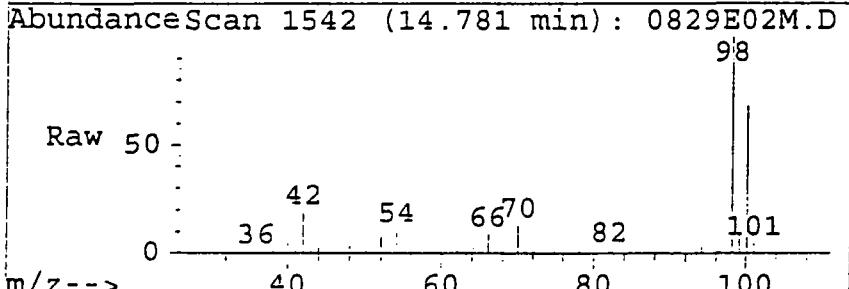
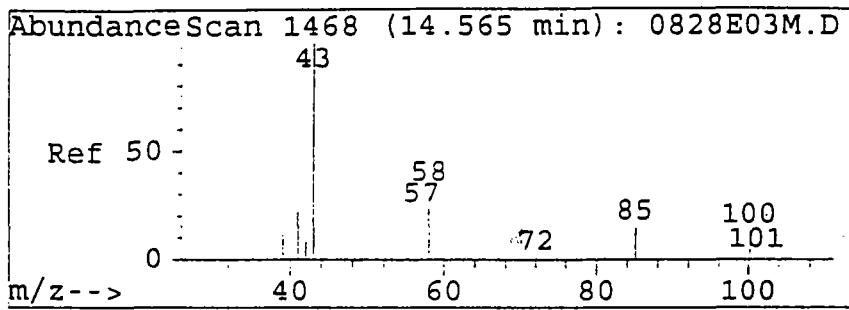
Abundance Ion 75.10 (74  
 Ion 53.10 (52  
 40000-  
 Ion 77.10 (76  
 Ion 89.05 (88  
 30000- 20.65

20000-

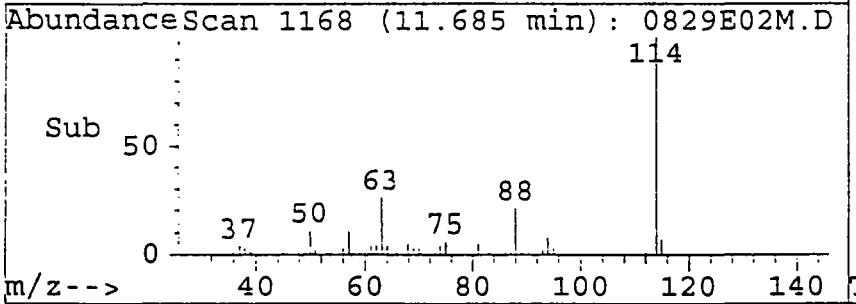
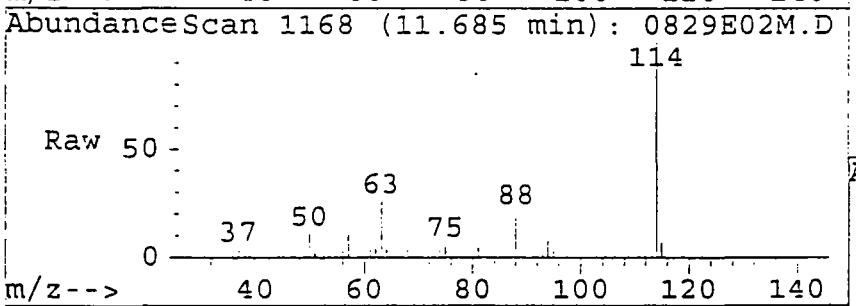
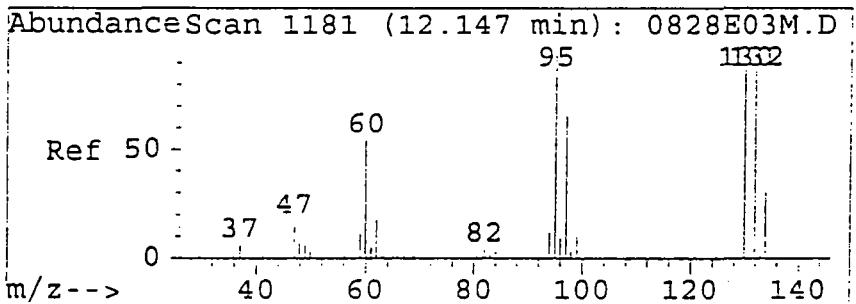
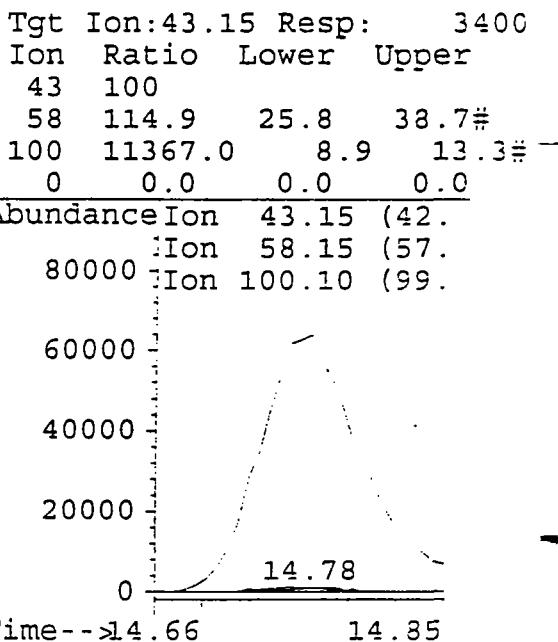
10000-

0

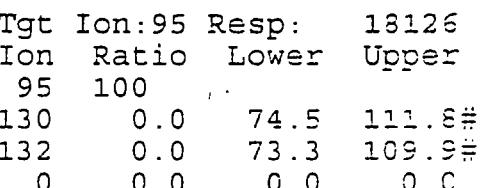
Time-->20.35 21.02



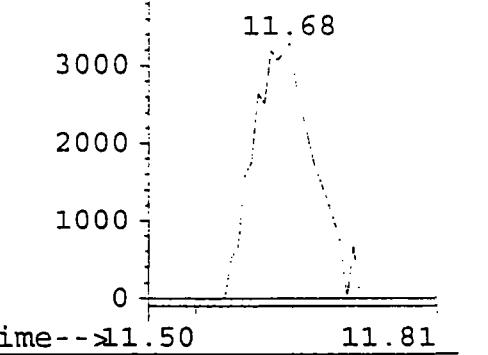
#51  
4-Methyl-2-pentanone  
Concen: 0.25 µg/L  
RT: 14.78 min Scan# 1542  
Delta R.T. 0.15 min  
Lab File: 0829E02M.D  
Acq: 29 Aug 97 9:57 pm



#59  
Trichloroethene  
Concen: 0.31 µg/L  
RT: 11.68 min Scan# 1168  
Delta R.T. -0.53 min  
Lab File: 0829E02M.D  
Acq: 29 Aug 97 9:57 pm



Abundance Ion 95.00 (94.  
Ion 129.90 (129  
Ion 132.00 (131



1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HB08367

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E10.D

Level: (low/med) LOW

Date Received: 08/16/97

\* Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

67-64-1	Acetone		5	U
71-43-2	Benzene		1	U
74-97-5	Bromochloromethane		1	U
75-27-4	Bromodichloromethane		1	U
75-25-2	Bromoform		1	U
74-83-9	Bromomethane		1	U
78-93-3	2-Butanone		5	U
75-15-0	Carbon Disulfide		1	U
56-23-5	Carbon Tetrachloride		1	U
108-90-7	Chlorobenzene		1	U
75-00-3	Chloroethane		1	U
67-66-3	Chloroform		1	U
74-87-3	Chloromethane		1	U
124-48-1	Dibromochloromethane		1	U
96-12-8	1,2-Dibromo-3-Chloropropane		1	U
106-93-4	1,2-Dibromoethane		1	U
95-50-1	1,2-Dichlorobenzene		1	U
541-73-1	1,3-Dichlorobenzene		1	U
106-46-7	1,4-Dichlorobenzene		1	U
75-34-3	1,1-Dichloroethane		1	U
107-06-2	1,2-Dichloroethane		1	U
75-35-4	1,1-Dichloroethene		1	U
156-59-2	Cis-1,2-Dichloroethene		1	U
156-60-5	Trans-1,2-Dichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
10061-01-5	Cis-1,3-Dichloropropene		1	U
10061-02-6	Trans-1,3-Dichloropropene		1	U
100-41-4	Ethylbenzene		1	U
591-78-6	2-Hexanone		5	U
75-09-2	Methylene Chloride		1	U
108-10-1	4-Methyl-2-Pentanone		5	U
100-42-5	Styrene		1	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U
127-18-4	Tetrachloroethene		1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HB08367

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0829E10.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl Chloride	1	U
1330-20-7	Xylene (Total)	5	U

1E CL  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

**CLIENT SAMPLE NO.**

Lab Name: IEA-NC

Method: SCW 10/92

HB08367

Lab Code: IEA

Case No.: - 364-226

SDG No. : 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836721

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0829E10.D

**Level:** (low/med) **LOW**

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/30/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

**Soil Extract Volume:** (uL)

**Soil Aliquot Volume:** (uL)

Number TICs Found: 0

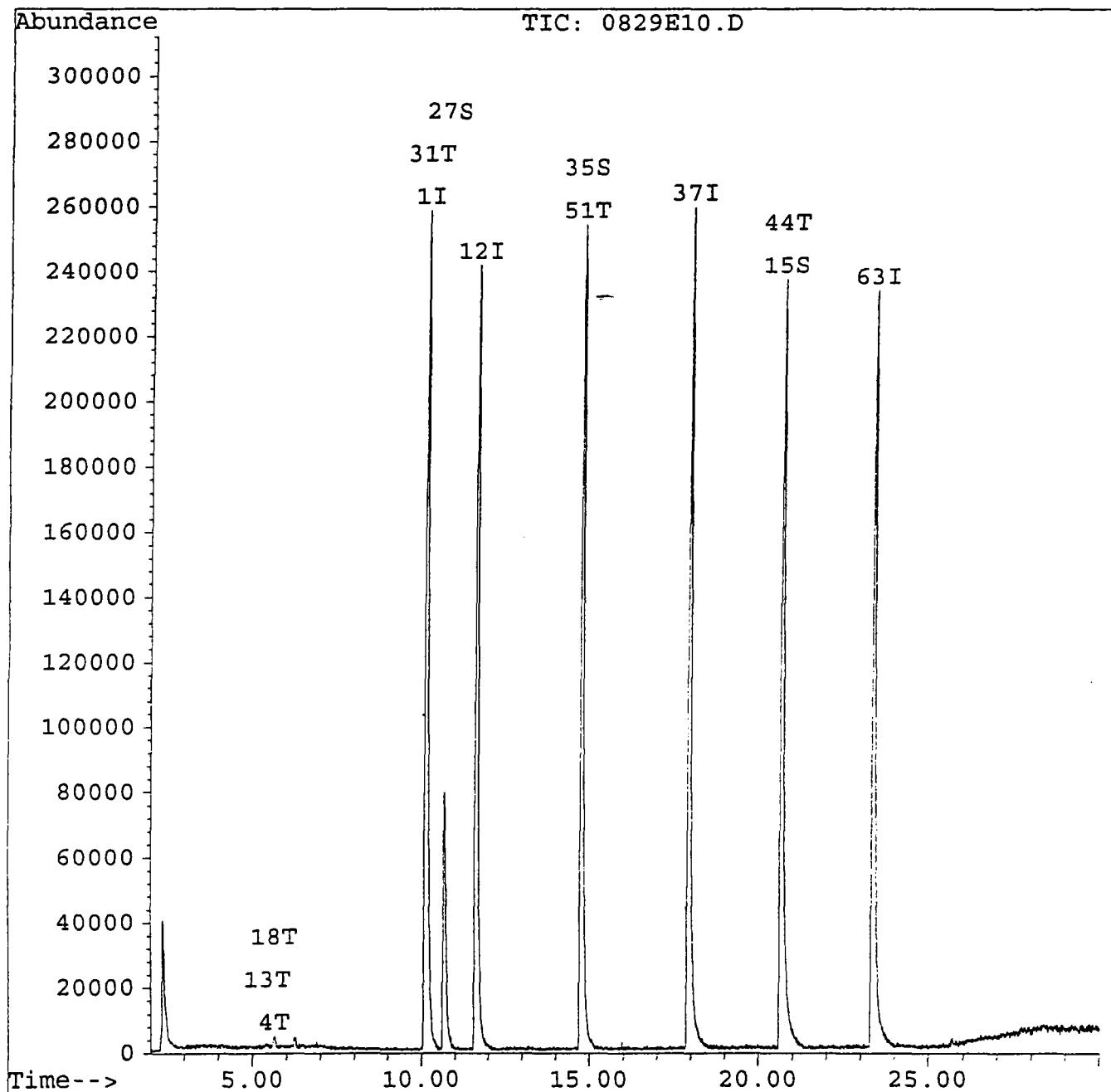
**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

Quantitation Report

Data File : C:\HPCHEM\1\DATA\970829E.B\0829E10.D  
Acq On : 30 Aug 97 3:08 am  
Sample : 970836721 IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 30 3:39 1997

Vial: 8  
Operator: CREWES  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\970829E.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 29 09:55:20 1997  
Response via : Single Level Calibration



## Quantitation Report

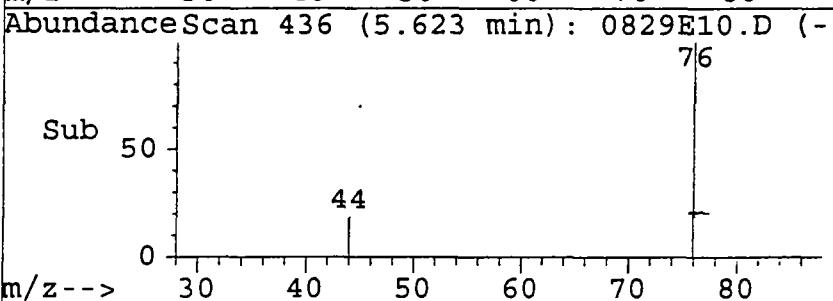
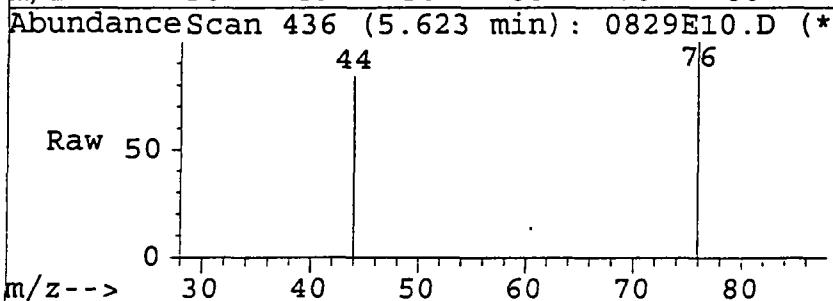
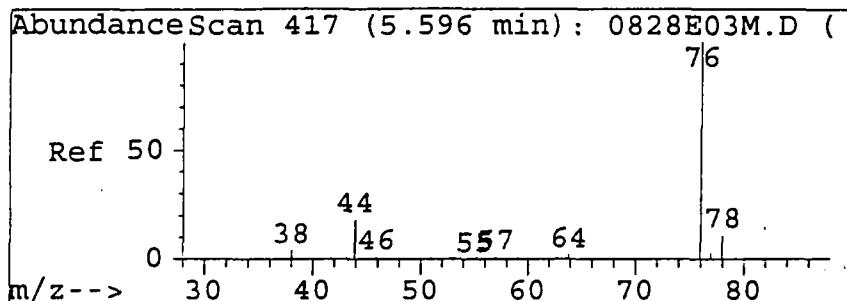
Data File : C:\HPCHEM\1\DATA\970829E.B\0829E10.D  
 Acq On : 30 Aug 97 3:08 am  
 Sample : 970836721 IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 30 3:39 1997

Vial: 8  
 Operator: CREWES  
 Inst : MSD5  
 Dilution: 1.00

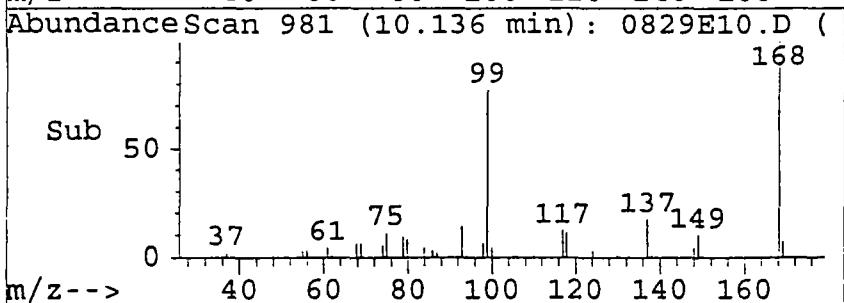
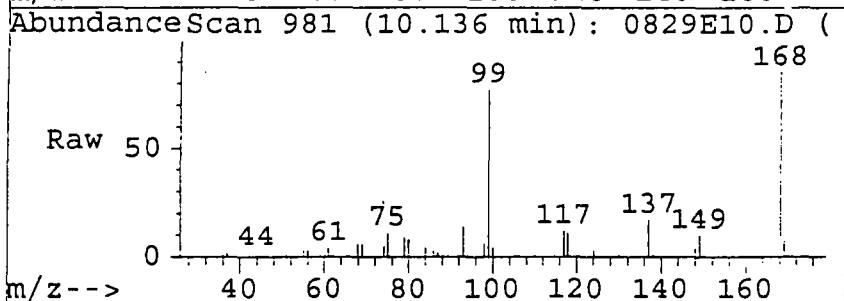
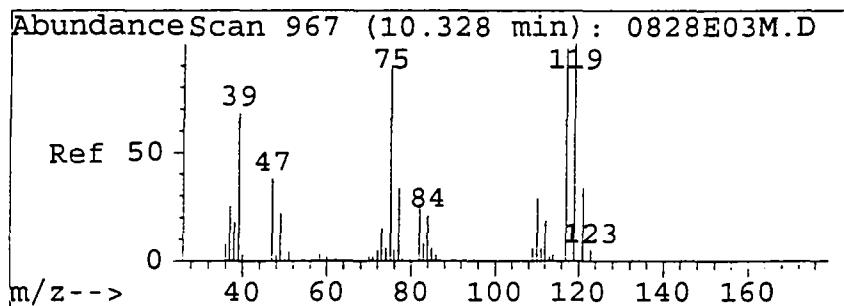
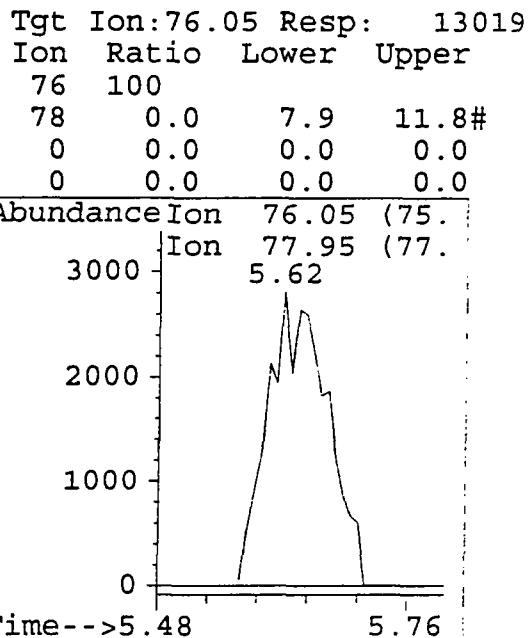
Method : C:\HPCHEM\1\DATA\970829E.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 29 09:55:20 1997  
 Response via : Continuing Calibration

1364-2461P  
CUI 9/3

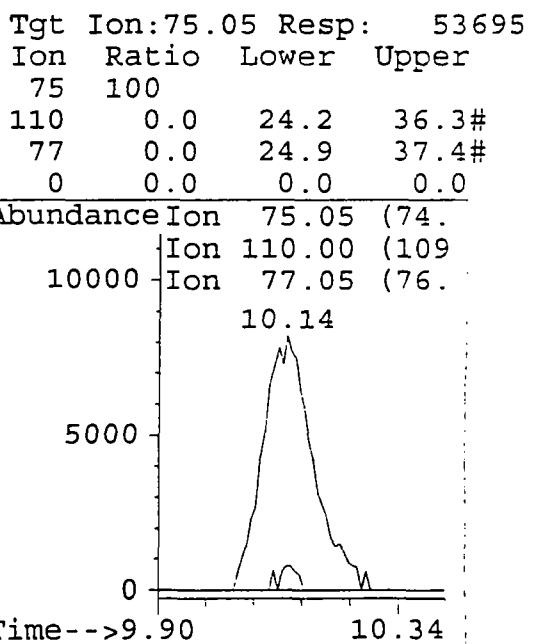
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.13	168	519555	5.00	µg/L	-0.06
12) 1,4-Difluorobenzene	11.64	114	574917	5.00	µg/L	-0.05
37) Chlorobenzene-d5	17.94	117	458850	5.00	µg/L	-0.05
63) 1,4-Dichlorobenzene-d4	23.36	152	217761	5.00	µg/L	-0.01
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.66	95	343769	5.22	µg/L	104.39
27) 1,2-Dichloroethane-d4	10.66	102	32526	4.39	µg/L	87.73
35) Toluene-d8	14.76	98	548447	5.00	µg/L	90.94
<b>Target Compounds</b>						Qvalue
4) Allyl chloride	5.62	76	13019	0.80	µg/L	# 1
13) Acetone	5.43	43	2157	0.87	µg/L	# 55
18) Carbon disulfide	5.62	76	13019	0.13	µg/L	# 73
31) 1,1-Dichloropropene	10.14	75	53695	0.84	µg/L	# 44
44) cis-1,4-Dichloro-2-butene	20.66	75	195018	38.26	µg/L	# 47
51) 4-Methyl-2-pentanone	14.75	43	3873	0.29	µg/L	# 1



#18  
Carbon disulfide  
Concen: 0.13 µg/L  
RT: 5.62 min Scan# 436  
Delta R.T. -0.05 min  
Lab File: 0829E10.D  
Acq: 30 Aug 97 3:08 am



#31  
1,1-Dichloropropene  
Concen: 0.84 µg/L  
RT: 10.14 min Scan# 981  
Delta R.T. -0.26 min  
Lab File: 0829E10.D  
Acq: 30 Aug 97 3:08 am



3LCA  
LOW CONC. WATER VOLATILE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS5T

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: LCS5T

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822512.D

Level: (low/med) LOW

Date Received:

\* Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

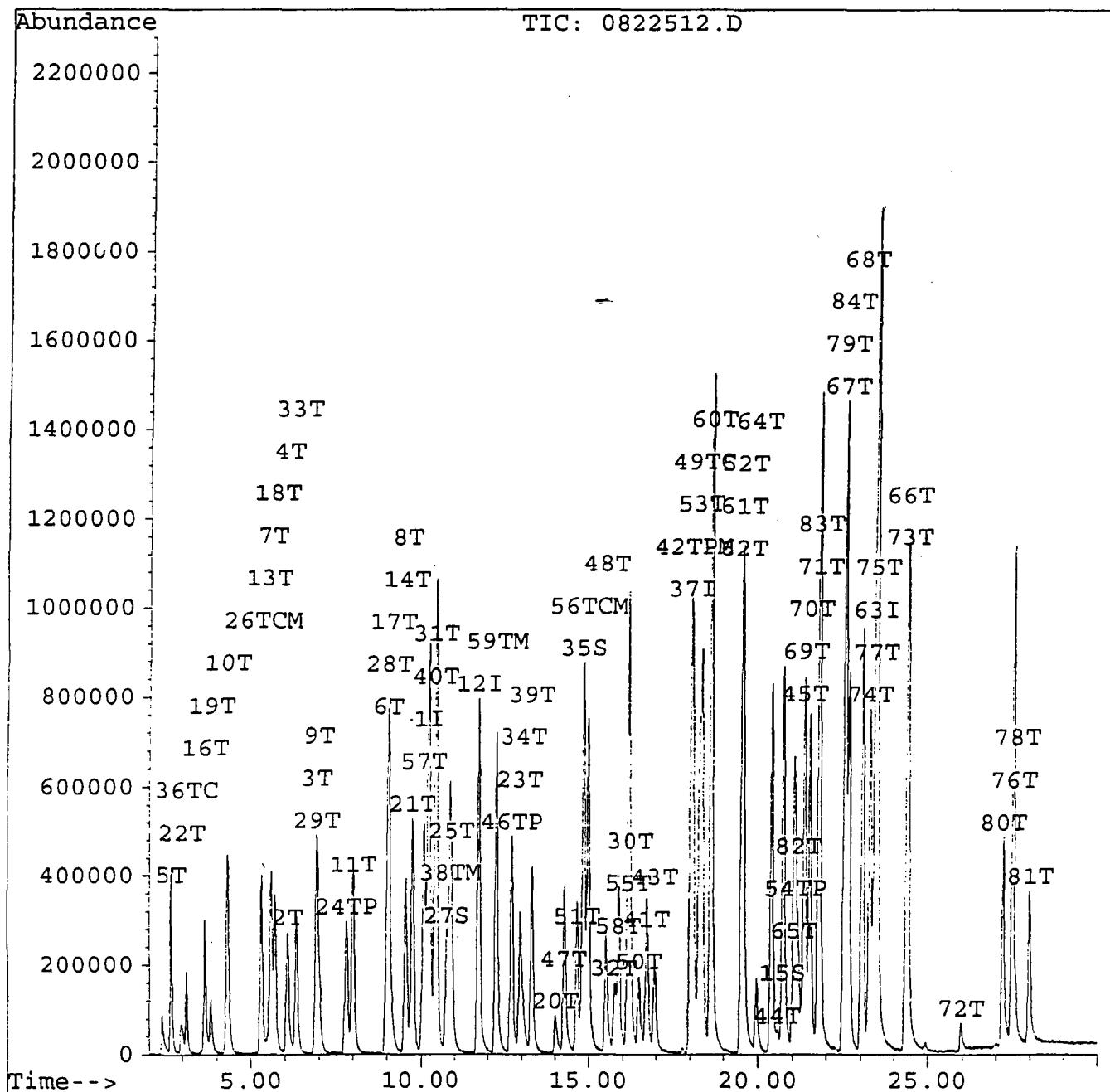
CAS NO.	COMPOUND	SPIKE ug/l	AMOUNT ug/l	% RECOVERY	RECOVE LIMITS	
					60 - 140	60 - 140
71-43-2	Benzene	5	4.2	84	60 - 140	60 - 140
75-25-2	Bromoform	5	4	80	60 - 140	60 - 140
56-23-5	Carbon Tetrachloride	5	4.2	84	60 - 140	60 - 140
106-93-4	1,2-Dibromoethane	5	4.2	84	60 - 140	60 - 140
106-46-7	1,4-Dichlorobenzene	5	3.6	72	60 - 140	60 - 140
107-06-2	1,2-Dichloroethane	5	3.9	78	60 - 140	60 - 140
78-87-5	1,2-Dichloropropane	5	4.3	86	60 - 140	60 - 140
10061-01-5	Cis-1,3-Dichloropropene	5	4.1	82	60 - 140	60 - 140
127-18-4	Tetrachloroethene	5	4.1	82	60 - 140	60 - 140
79-00-5	1,1,2-Trichloroethane	5	4.2	84	60 - 140	60 - 140
79-01-6	Trichloroethene	5	4.3	86	60 - 140	60 - 140
75-01-4	Vinyl Chloride	5	3.8	76	60 - 140	60 - 140

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822512.D  
 Acq On : 22 Aug 97 4:45 pm  
 Sample : LCS5T IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 17:15 1997

Vial: 9  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822512.D  
 Acq On : 22 Aug 97 4:45 pm  
 Sample : LCS5T IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 17:15 1997

Vial: 9  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QION	Response	Conc	Units	Dev(Mir)
1) Pentafluorobenzene	10.21	168	1770435	5.00	µg/L	-0.06
12) 1,4-Difluorobenzene	11.72	114	1901435	5.00	µg/L	-0.05
37) Chlorobenzene-d5	18.01	117	1411753	5.00	µg/L	0.02
63) 1,4-Dichlorobenzene-d4	23.43	152	767001	5.00	µg/L	0.06
<b>System Monitoring Compounds</b>						%Recovery
15) 4-Bromofluorobenzene	20.72	95	1052009	4.52	µg/L	90.4
27) 1,2-Dichloroethane-d4	10.75	102	118381	4.35	µg/L	86.9
35) Toluene-d8	14.82	98	1842705	4.96	µg/L	100
<b>Target Compounds</b>						Qvalue
2) Acetonitrile	6.08	41	482994	3.82	µg/L	100
3) Acrylonitrile	6.91	53	30037	3.61	µg/L	# 43
4) Allyl chloride	6.06	76	197696	3.74	µg/L	96
5) Dichlorodifluoromethane	2.67	85	792955	3.87	µg/L	99
6) 2,2-Dichloropropane	9.01	77	899002	3.92	µg/L	98
7) Iodomethane	5.59	142	1291470	3.81	µg/L	99
8) Methacrylonitrile	9.55	41	58988	3.32	µg/L	# 84
9) Methyl-tert-Butyl ether	6.99	73	623022	3.86	µg/L	98
10) Trichlorofluoromethane	4.31	101	1131358	3.85	µg/L	99
11) Vinyl acetate	7.99	43	257346	3.74	µg/L	99
13) Acetone	5.50	43	137206	21.36	µg/L	95
14) Bromochloromethane	9.54	128	283577	3.67	µg/L	97
16) Bromomethane	3.66	94	407315	3.99	µg/L	98
17) 2-Butanone	9.14	43	247484	24.09	µg/L	95
18) Carbon disulfide	5.71	76	1213980	3.71	µg/L	# 9
19) Chloroethane	3.84	64	225388	3.82	µg/L	100
20) 2-Chloroethyl vinyl ether	14.03	63	133284	3.66	µg/L	95
21) Chloroform	9.73	83	1214740	3.85	µg/L	100
22) Chloromethane	2.99	50	259493	3.98	µg/L	97
23) Dibromomethane	12.94	93	393846	3.82	µg/L	98
24) 1,1-Dichloroethane	7.80	63	863856	3.67	µg/L	99
25) 1,2-Dichloroethane	10.90	62	578888	3.91	µg/L	98
26) 1,1-Dichloroethene	5.31	96	450997	3.71	µg/L	97
28) cis-1,2-Dichloroethene	9.03	96	522563	3.86	µg/L	99
29) trans-1,2-Dichloroethene	6.91	96	479261	3.68	µg/L	98
30) 1,3-Dichloropropane	16.23	76	506965	3.72	µg/L	96
31) 1,1-Dichloropropene	10.42	75	793384	3.84	µg/L	100
32) Ethyl methacrylate	15.75	69	292828	3.80	µg/L	98
33) Methylene chloride	6.33	84	420141	3.70	µg/L	97
34) Methyl methacrylate	13.06	69	119558	3.76	µg/L	98
36) Vinyl chloride	3.12	62	340674	3.84	µg/L	99
38) Benzene	10.86	78	1333292	4.21	µg/L	100
39) Bromodichloromethane	13.30	83	802358	4.19	µg/L	97

(#) = qualifier out of range (m) = manual integration

0822512.D M691.M Fri Aug 22 17:16:08 1997 - MSD5

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822512.D  
 Acq On : 22 Aug 97 4:45 pm  
 Sample : LCS5T IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 17:15 1997

Vial: 9  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Carbon tetrachloride	10.42	117	1054208	4.20	µg/L	100
41) Chlorodibromomethane	16.71	129	512885	4.13	µg/L	100
42) Chlorobenzene	18.07	112	1186665	3.83	µg/L	97
43) 1,2-Dibromoethane	16.95	107	490303	4.21	µg/L	99
44) cis-1,4-Dichloro-2-butene	20.56	75	23762	1.51	µg/L #	1
45) trans-1,4-Dichloro-2-butene	21.32	53	40305	1.91	µg/L #	1
46) 1,2-Dichloropropane	12.69	63	524460	4.29	µg/L	98
47) cis-1,3-Dichloropropene	14.27	75	659554	4.12	µg/L	99
48) trans-1,3-Dichloropropene	15.50	75	512087	4.41	µg/L	94
49) Ethylbenzene	18.34	91	1845569	3.84	µg/L	99
50) 2-Hexanone	16.49	43	444806	25.37	µg/L	96
51) 4-Methyl-2-pentanone	14.65	43	814826	24.98	µg/L	99
52) Styrene	19.56	104	1053048	3.83	µg/L	97
53) 1,1,1,2-Tetrachloroethane	18.26	131	582799	3.86	µg/L	99
54) 1,1,2,2-Tetrachloroethane	21.09	83	385909	3.96	µg/L	98
55) Tetrachloroethene	16.17	164	702464	4.10	µg/L	98
56) Toluene	14.96	91	1633402	4.22	µg/L	100
57) 1,1,1-Trichloroethane	10.07	97	1105017	4.17	µg/L	98
58) 1,1,2-Trichloroethane	15.86	97	349250	4.21	µg/L	97
59) Trichloroethene	12.24	95	736420	4.33	µg/L	97
60) m,p-Xylene	18.62	106	1377690	7.70	µg/L	95
61) o-Xylene	19.51	106	662188	3.85	µg/L	96
62) Xylene (total)	19.51	106	662188	3.85	µg/L	96
64) Bromoform	19.95	173	229068	3.97	µg/L	98
65) Bromobenzene	21.05	156	546383	3.99	µg/L	97
66) n-Butylbenzene	24.40	91	1616834	3.89	µg/L	99
67) tert-Butylbenzene	22.52	119	1879810	3.96	µg/L	98
68) sec-Butylbenzene	23.04	105	2282880	3.93	µg/L	99
69) n-Propylbenzene	21.35	91	2192387	4.02	µg/L	100
70) 2-Chlorotoluene	21.51	91	1538461	4.01	µg/L	98
71) 4-Chlorotoluene	21.76	91	1726722	4.06	µg/L	98
72) 1,2-Dibromo-3-chloropropan	25.97	75	47797	4.29	µg/L	96
73) 1,2-Dichlorobenzene	24.36	146	822840	3.88	µg/L	99
74) 1,3-Dichlorobenzene	23.27	146	980259	3.86	µg/L	99
75) 1,4-Dichlorobenzene	23.48	146	985768	3.56	µg/L	95
76) Hexachlorobutadiene	27.48	225	545762	3.96	µg/L	97
77) p-Isopropyltoluene	23.41	119	1701920	3.89	µg/L	99
78) Naphthalene	27.58	128	224460	3.54	µg/L	100
79) Pentachloroethane	22.53	167	285374	3.72	µg/L	98
80) 1,2,4-Trichlorobenzene	27.20	180	391901	3.60	µg/L	100
81) 1,2,3-Trichlorobenzene	27.98	180	291782	3.65	µg/L	93
82) 1,2,3-Trichloropropane	21.17	75	293693	3.91	µg/L	95
83) 1,3,5-Trimethylbenzene	21.77	105	1538233	4.00	µg/L	99
84) 1,2,4-Trimethylbenzene	22.64	105	1515878	3.91	µg/L	98

(#) = qualifier out of range (m) = manual integration

0822512.D M691.M Fri Aug 22 17:16:10 1997 MSD5

Page 2-

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1064-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822506.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l Q
67-64-1	Acetone	5	J
71-43-2	Benzene	5	
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	4	
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	5	
156-59-2	Cis-1,2-Dichloroethene	0.2	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 25 (g/mL) ml

Lab File ID: 0822506.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l Q

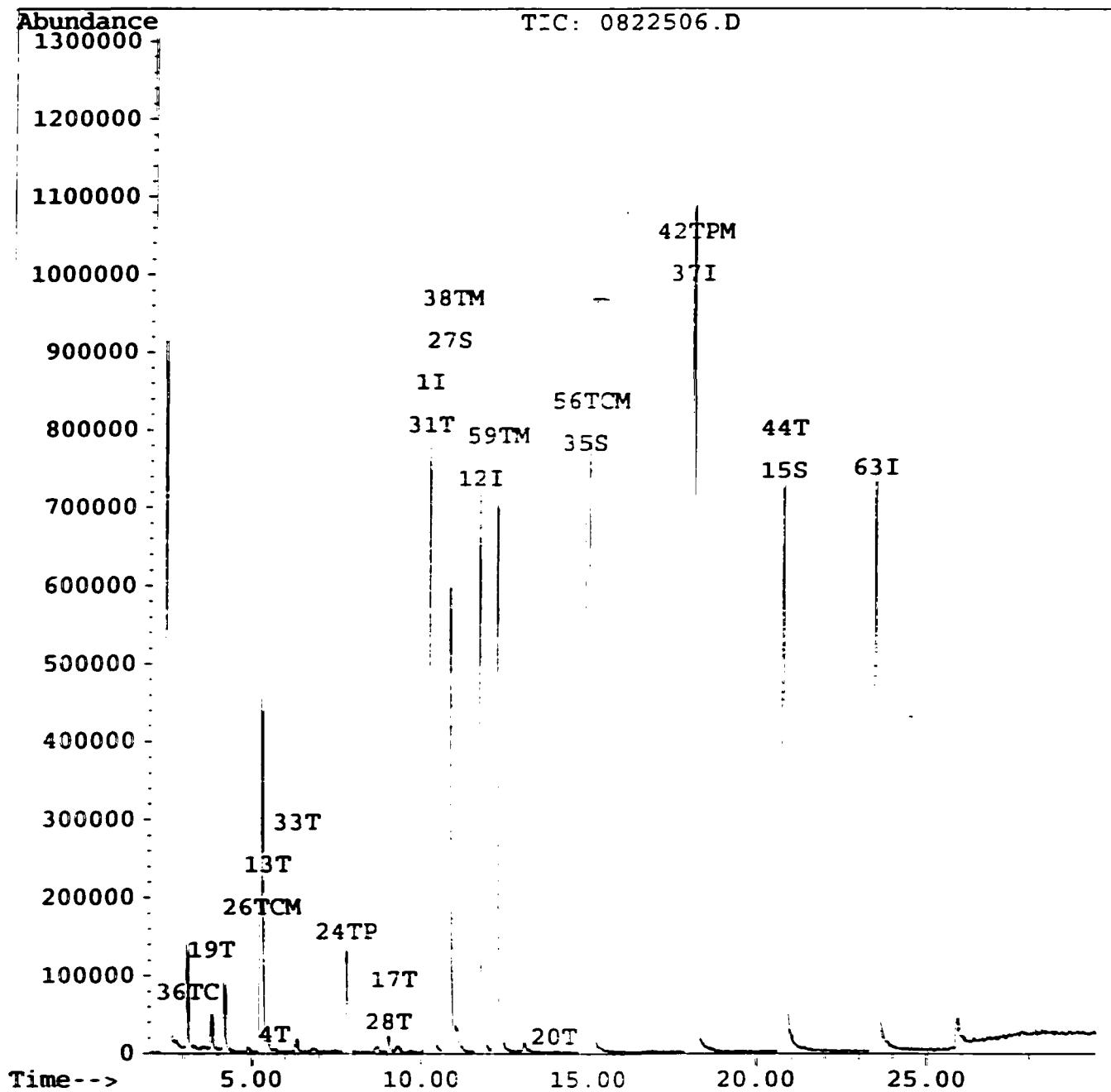
108-88-3	Toluene	5	
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	5	
75-01-4	Vinyl Chloride	3	
1330-20-7	Xylene (Total)	5	U

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822506.D  
Acq On : 22 Aug 97 12:59 pm  
Sample : 970836701MS IEA MSD5  
Misc : WATER LOW 1X  
Quant Time: Aug 22 13:29 1997

Vial: 3  
Operator: MOORE  
Inst : MSD5  
Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
Title : 6/91 IEA MSD5  
Last Update : Fri Aug 22 09:47:50 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9708225.B\0822506.D  
 Acq On : 22 Aug 97 12:59 pm  
 Sample : 970836701MS IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Aug 22 13:29 1997

Vial: 3  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : C:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.21	168	1565770	5.00	µg/L	-0.06
12) 1,4-Difluorobenzene	11.71	114	1704737	5.00	µg/L	-0.05
37) Chlorobenzene-d5	17.99	117	1358399	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.41	152	695505	5.00	µg/L	0.04

## System Monitoring Compounds

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	%Recovery
15) 4-Bromofluorobenzene	20.70	95	1031166	4.94	µg/L	98.89%
27) 1,2-Dichloroethane-d4	10.75	102	105184	4.31	µg/L	86.15%
35) Toluene-d8	14.82	98	1629982	4.90	µg/L	97.92%

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Allyl chloride	5.68	76	8803	0.19	µg/L	# 1
13) Acetone	5.48	43	27641	4.80	µg/L	95
17) 2-Butanone	9.19	43	2606	0.28	µg/L	# 48
19) Chloroethane	3.83	64	99586	1.88	µg/L	98
20) 2-Chloroethyl vinyl ether	13.97	63	5633	0.17	µg/L	# 48
24) 1,1-Dichloroethane	7.79	63	388532	1.84	µg/L	98
26) 1,1-Dichloroethene	5.31	96	507635	4.66	µg/L	99
28) cis-1,2-Dichloroethene	9.04	96	26424	0.22	µg/L	91
31) 1,1-Dichloropropene	10.19	75	158381	0.86	µg/L	# 43
33) Methylene chloride	6.33	84	20412	0.20	µg/L	93
36) Vinyl chloride	3.12	62	242267	3.04	µg/L	100
38) Benzene	10.84	78	1507459	4.94	µg/L	100
42) Chlorobenzene	18.06	112	1356796	4.55	µg/L	96
44) cis-1,4-Dichloro-2-butene	20.70	75	554598	36.54	µg/L	# 60
56) Toluene	14.97	91	1823271	4.89	µg/L	99
59) Trichloroethene	12.23	95	774319	4.73	µg/L	96

Aug 22 1997

(##) = qualifier out of range (m) = manual integration

0822506.D M691.M Fri Aug 22 13:30:06 1997 MSD5

Page 1

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822507.D

Level: (low/med) LOW

Date Received: 08/16/97

\* Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
67-64-1	Acetone	5	
71-43-2	Benzene	5	
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
56-23-5	Carbon Tetrachloride	1	U
108-90-7	Chlorobenzene	5	
75-00-3	Chloroethane	2	
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	1	U
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	2	
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	5	
156-59-2	Cis-1,2-Dichloroethene	0.2	J
156-60-5	Trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene Chloride	0.2	J
108-10-1	4-Methyl-2-Pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
67-64-1	Acetone	5		
71-43-2	Benzene	5		
74-97-5	Bromochloromethane	1	U	
75-27-4	Bromodichloromethane	1	U	
75-25-2	Bromoform	1	U	
74-83-9	Bromomethane	1	U	
78-93-3	2-Butanone	5	U	
75-15-0	Carbon Disulfide	1	U	
56-23-5	Carbon Tetrachloride	1	U	
108-90-7	Chlorobenzene	5		
75-00-3	Chloroethane	2		
67-66-3	Chloroform	1	U	
74-87-3	Chloromethane	1	U	
124-48-1	Dibromochloromethane	1	U	
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	
106-93-4	1,2-Dibromoethane	1	U	
95-50-1	1,2-Dichlorobenzene	1	U	
541-73-1	1,3-Dichlorobenzene	1	U	
106-46-7	1,4-Dichlorobenzene	1	U	
75-34-3	1,1-Dichloroethane	2		
107-06-2	1,2-Dichloroethane	1	U	
75-35-4	1,1-Dichloroethene	5		
156-59-2	Cis-1,2-Dichloroethene	0.2	J	
156-60-5	Trans-1,2-Dichloroethene	1	U	
78-87-5	1,2-Dichloropropane	1	U	
10061-01-5	Cis-1,3-Dichloropropene	1	U	
10061-02-6	Trans-1,3-Dichloropropene	1	U	
100-41-4	Ethylbenzene	1	U	
591-78-6	2-Hexanone	5	U	
75-09-2	Methylene Chloride	0.2	J	
108-10-1	4-Methyl-2-Pentanone	5	U	
100-42-5	Styrene	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	U	
127-18-4	Tetrachloroethene	1	U	

1LCA  
LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0822507.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: not dec.

Date Analyzed: 08/22/97

GC Column: DB-624 ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

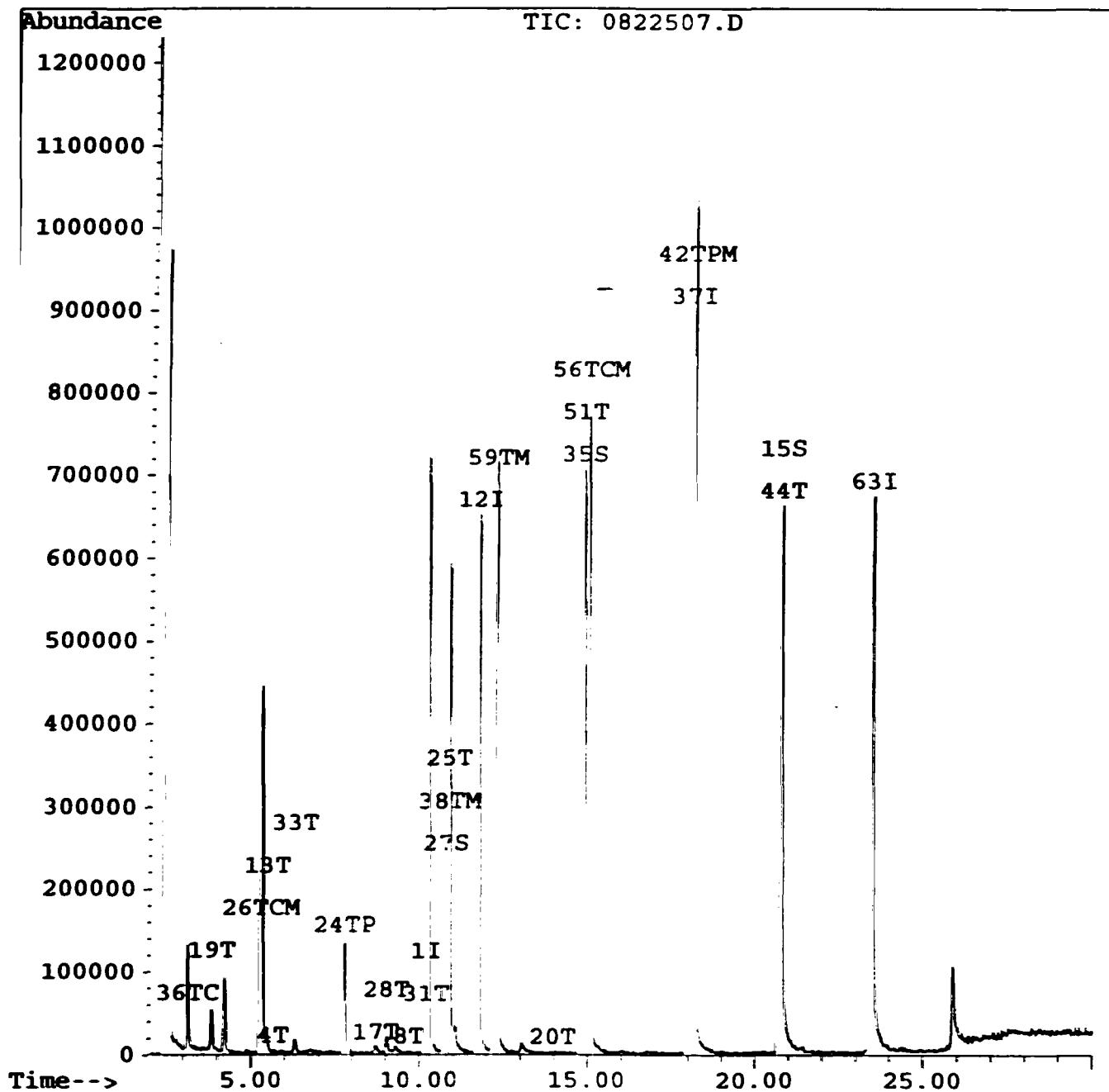
108-88-3	Toluene	5	
71-55-6	1,1,1-Trichloroethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	5	
75-01-4	Vinyl Chloride	3	
1330-20-7	Xylene (Total)	5	U

Quantitation Report

**Data File :** J:\HPCHEM\1\DATA\9708225.B\0822507.D  
**Acq On :** 22 Aug 97 1:36 pm  
**Sample :** 970836701MSD IEA MSDS  
**Misc :** WATER LOW 1X  
**Quant Time:** Sep 3 9:04 1997

**Vial:** 4  
**Operator:** MOORE  
**Inst :** MSD5  
**Dilution:** 1.00

**Method :** J:\HPCHEM\1\DATA\9708225.B\M691.M  
**Title :** 6/91 IEA MSDS  
**Last Update :** Fri Aug 22 09:47:50 1997  
**Response via :** Single Level Calibration



## Quantitation Report

Data File : J:\HPCHEM\1\DATA\9708225.B\0822507.D  
 Acq On : 22 Aug 97 1:36 pm  
 Sample : 970836701MSD IEA MSD5  
 Misc : WATER LOW 1X  
 Quant Time: Sep 3 9:04 1997

Vial: 4  
 Operator: MOORE  
 Inst : MSD5  
 Dilution: 1.00

Method : J:\HPCHEM\1\DATA\9708225.B\M691.M  
 Title : 6/91 IEA MSD5  
 Last Update : Fri Aug 22 09:47:50 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.20	168	1450338	5.00	µg/L	-0.07
12) 1,4-Difluorobenzene	11.71	114	1581166	5.00	µg/L	-0.06
37) Chlorobenzene-d5	17.99	117	1266683	5.00	µg/L	0.00
63) 1,4-Dichlorobenzene-d4	23.42	152	656867	5.00	µg/L	0.05
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
15) 4-Bromofluorobenzene	20.72	95	909741	4.70	µg/L	94.06%
27) 1,2-Dichloroethane-d4	10.73	102	94859	4.19	µg/L	83.76%
35) Toluene-d8	14.82	98	1509952	4.89	µg/L	97.80%
<b>Target Compounds</b>						<b>Qvalue</b>
4) Allyl chloride	5.67	76	6889	0.16	µg/L	# 1
8) Methacrylonitrile	9.69	41	2552	0.18	µg/L	# 33
13) Acetone	5.46	43	27313	5.11	µg/L	m 1
17) 2-Butanone	8.71	43	7966	0.93	µg/L	92
19) Chloroethane	3.84	64	100238	2.05	µg/L	99
20) 2-Chloroethyl vinyl ether	13.97	63	3479	0.11	µg/L	# 48
24) 1,1-Dichloroethane	7.76	63	389025	1.99	µg/L	99
25) 1,2-Dichloroethane	10.83	62	16416	0.13	µg/L	# 92
26) 1,1-Dichloroethene	5.29	96	494221	4.89	µg/L	96
28) cis-1,2-Dichloroethene	9.02	96	26230	0.23	µg/L	90
31) 1,1-Dichloropropene	10.20	75	146069	0.85	µg/L	# 43
33) Methylene chloride	6.29	84	21870	0.23	µg/L	93
36) Vinyl chloride	3.12	62	235398	3.19	µg/L	100
38) Benzene	10.83	78	1483898	5.22	µg/L	100
42) Chlorobenzene	18.06	112	1331895	4.79	µg/L	95
44) cis-1,4-Dichloro-2-butene	20.71	75	486026	34.34	µg/L	# 60
51) 4-Methyl-2-pentanone	14.84	43	8335	0.28	µg/L	# 1
56) Toluene	14.96	91	1768202	5.09	µg/L	99
59) Trichloroethene	12.21	95	774162	5.07	µg/L	95

Take 7

(#) = qualifier out of range (m) = manual integration

0822507.D M691.M Wed Sep 03 09:05:33 1997 VOL1

Page 1

2C  
LOW CONC. WATER WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

	EPA SAMPLE NO.	S1 (NBZ)	S2 (FBP)	S3 (TPH)	S4 (PHL)	S5 (2FP)	S6 (TBP)	TOT OUT	
01	SBLK57		82	70	74	72	70	79	0
02	SLCS57		80	71	70	0*	65	77	1
03	ECC1T1W		65	55	24	57	53	65	0
04	ECC1T1WD		70	54	26	61	54	62	0
05	ECC1T1W MS		81	76	52	77	69	82	0
06	ECC1T1W MSD		78	254*	40	0*	55	260*	3
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5	(40-112)
S2 (FBP) = 2-Fluorobiphenyl	(42-110)
S3 (TPH) = Terphenyl-d14	(24-140)
S4 (PHL) = Phenol-d5	(17-113)
S5 (2FP) = 2-Fluorophenol	(16-110)
S6 (TBP) = 2,4,6-Tribromophenol	(18-126)

# Column to be used to flag recovery values

\* Values outside of QC limits.

D System Monitoring Compound diluted out

3B  
LOW CONC. WATER SEMIVOLATILE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	SPIKE ug/l	AMOUNT ug/l	% RECOVERY	RECOVE LIMITS
108-95-2	Phenol	40	25	62	44 - 120
111-44-4	Bis(2-Chloroethyl)Ether	20	17	85	64 - 110
95-57-8	2-Chlorophenol	40	29	72	58 - 110
621-64-7	N-Nitroso-Di-N-Propylamine	20	20	100	34 - 102
67-72-1	Hexachloroethane	20	14	70	32 - 77
78-59-1	Isophorone	20	17	85	49 - 110
120-82-1	1,2,4-Trichlorobenzene	20	15	75	44 - 96
91-20-3	Naphthalene	20	16	80	56 - 160
106-47-8	4-Chloroaniline	40	4	10	35 - 98
88-06-2	2,4,6-Trichlorophenol	40	28	70	65 - 110
121-14-2	2,4-Dinitrotoluene	20	14	70	61 - 140
84-66-2	Diethylphthalate	20	14	70	76 - 104
86-30-6	N-Nitrosodiphenylamine (1)	20	2	10	35 - 120
118-74-1	Hexachlorobenzene	20	15	75	30 - 95
50-32-8	Benzo(a)Pyrene	20	27	140	55 - 122

3C  
LOW CONC. WATER WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVE

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix Spike - Client Sample No.: ECC1T1W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	40	0	29	72	44-120
bis(2-Chloroethyl)ether	20	0	17	85	64-110
2-Chlorophenol	40	0	30	75	58-110
N-Nitroso-di-N-Prop. (1)	20	0	17	85	34-102
Hexachloroethane	20	0	15	75	32-77
Isophorone	20	0	16	80	49-110
1,2,4-Trichlorobenzene	20	0	18	90	44-96
Naphthalene	20	0	18	90	56-160
4-Chloroaniline	40	0	2	5 *	35-98
2,4,6-Trichlorophenol	40	0	29	72	65-110
2,4-Dinitrotoluene	20	0	15	75	61-140
Diethylphthalate	20	0	15	75 *	76-104
N-Nitrosodiphenylamine	20	0	16	80	35-120
Hexachlorobenzene	20	0	14	70	30-95
Benzo(a)pyrene	20	0	11	55	55-92

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	40	6	15 *	131*	42	44-120
bis(2-Chloroethyl)ether	20	15	75	12	42	64-110
2-Chlorophenol	40	14	35 *	73*	42	58-110
N-Nitroso-di-N-Prop. (1)	20	12	60	34	42	34-102
Hexachloroethane	20	13	65	14	42	32-77
Isophorone	20	17	85	6	42	49-110
1,2,4-Trichlorobenzene	20	15	75	18	42	44-96
Naphthalene	20	16	80	12	42	56-160
4-Chloroaniline	40	0	0 *	200*	42	35-98
2,4,6-Trichlorophenol	40	93	232 *	105*	42	65-110
2,4-Dinitrotoluene	20	54	270 *	113*	42	61-140
Diethylphthalate	20	33	165 *	75*	42	76-104
N-Nitrosodiphenylamine	20	0	0 *	200*	42	35-120
Hexachlorobenzene	20	11	55	24	42	30-95
Benzo(a)pyrene	20	340	1700 *	187*	42	55-92

(1) N-Nitroso-di-n-propylamine

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits.

RPD: 8 out of 15 outside limits

Spike Recovery: 10 out of 30 outside limits

COMMENTS: \_\_\_\_\_

4B  
LOW CONC. WATER SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 0919604.D

Lab Sample ID: SBLK57

Instrument ID: MSD6

Date Extracted: 08/21/97

Matrix: (soil/water) WATER

Date Analyzed: 09/19/97

Level: (low/med) low

Time Analyzed: 11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS57	SLCS57	0919605.D	09/19/97
02	ECC1TIW	970836701	0919606.D	09/19/97
03	ECC1TIWD	970836702	0919607.D	09/19/97
04	ECC1TIW MS	970836701MS	0919608.D	09/19/97
05	ECC1TIW MSD	970836701MSD	0919609.D	09/19/97
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

page 1 of 1

**LOW CONC. WATER SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 09186DF1.D

DFTPP Injection Date: 09/18/97

Instrument ID: MSD6

DFTPP Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	25.0 - 75.0% of mass 198	47.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	18.0
365	Greater than 0.75% of mass 198	1.9
441	Present, but less than mass 443	7.1
442	40.0 - 110.0% of mass 198	44.0
443	15.0 - 24.0% of mass 442	8.6 ( 19.6)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0406M	SSTD0406M	0918601.D	09/18/97	10:24
02	SSTD0406M	SSTD0406M	0918601A.D	09/18/97	10:24
03	SSTD1606M	SSTD1606M	0918602.D	09/18/97	11:17
04	SSTD1606M	SSTD1606M	0918602A.D	09/18/97	11:17
05	SSTD0106M	SSTD0106M	0918603.D	09/18/97	12:03
06	SSTD0106M	SSTD0106M	0918603A.D	09/18/97	12:03
07	SSTD0206M	SSTD0206M	0918604.D	09/18/97	12:50
08	SSTD0206M	SSTD0206M	0918604A.D	09/18/97	12:50
09	SSTD1006M	SSTD1006M	0918605.D	09/18/97	13:36
10	SSTD1006M	SSTD1006M	0918605A.D	09/18/97	13:36
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
**SW-846 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1264-226

SDG No.: 08367

Lab File ID: 09186DF1.D

DFTPP Injection Date: 09/18/97

Instrument ID: MSD6

DFTPP Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	40.0 - 60.0% of mass 198	47.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	18.0
365	Greater than 1.0% of mass 198	1.9
441	Present, but less than mass 443	7.1
442	Greater than 40.0% of mass 198	44.0
443	17.0 - 23.0% of mass 442	8.6 ( 19.6)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0506N	SSTD0506N	0918606.D	09/18/97	14:22
02	SSTD1606N	SSTD1606N	0918607.D	09/18/97	15:08
03	SSTD0206N	SSTD0206N	0918608.D	09/18/97	15:54
04	SSTD1206N	SSTD1206N	0918609.D	09/18/97	16:40
05	SSTD0806N	SSTD0806N	0918610.D	09/18/97	17:26
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
 LOW CONC. WATER SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
 DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID: 09196DF2.D

DFTPP Injection Date: 09/19/97

Instrument ID: MSD6

DFTPP Injection Time: 08:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	32.7
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	53.0
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	25.0 - 75.0% of mass 198	46.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0 of mass 198	19.2
365	Greater than 0.75% of mass 198	2.1
441	Present, but less than mass 443	9.0
442	40.0 - 110.0% of mass 198	57.6
443	15.0 - 24.0% of mass 442	11.1 ( 19.3)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0406P	SSTD0406P	0919601.D	09/19/97	08:49
02	SSTD0406P	SSTD0406P	0919601A.D	09/19/97	08:49
03	SBLK57	SBLK57	0919604.D	09/19/97	11:16
04	SLCS57	SLCS57	0919605.D	09/19/97	12:03
05	ECC1T1W	970836701	0919606.D	09/19/97	12:50
06	ECC1T1WD	970836702	0919607.D	09/19/97	13:37
07	ECC1T1W MS	970836701MS	0919608.D	09/19/97	14:24
08	ECC1T1W MSD	970836701MSD	0919609.D	09/19/97	15:12
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
**SW-846 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

**Lab Name:** IEA-NC      **Method:** 8270  
**Lab Code:** IEA      **Case No.:** 1364-226      **SDG No.:** 08367  
**Lab File ID:** 09196DF2.D      **DFTPP Injection Date:** 09/19/97  
**Instrument ID:** MSD6      **DFTPP Injection Time:** 08:33

<b>m/e</b>	<b>ION ABUNDANCE CRITERIA</b>	<b>% RELATIVE ABUNDANCE</b>
51	30.0 - 60.0% of mass 198	32.7
68	Less than 2.0% of mass 69	0.0 ( 0.0)1
69	Mass 69 relative abundance	53.0
70	Less than 2.0% of mass 69	0.2 ( 0.4)1
127	40.0 - 60.0% of mass 198	46.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0 of mass 198	19.2
365	Greater than 1.0% of mass 198	2.1
441	Present, but less than mass 443	9.0
442	Greater than 40.0% of mass 198	57.6
443	17.0 - 23.0% of mass 442	11.1 ( 19.3)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<b>CLIENT SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>DATE ANALYZED</b>	<b>TIME ANALYZED</b>
01	SSTD0506Q	SSTD0506Q	0919602.D	09/19/97	09:37
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

## LOW CONC. WATER SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Lab File ID (Standard): 0919601.D

Date Analyzed: 09/19/97

Instrument ID: MSD6

Time Analyzed: 08:49

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	623617	9.93	2463025	12.87	1447685	17.11
UPPER LIMIT	1247234	10.43	4926050	13.37	2895370	17.61
LOWER LIMIT	311808	9.43	1231512	12.37	723842	16.61
EPA SAMPLE NO.						
01 SBLK57	519925	9.94	2141826	12.86	1428573	17.11
02 SLCS57	574592	9.94	2240056	12.87	1382967	17.10
03 ECC1T1W	645632	9.94	2503053	12.86	1553403	17.11
04 ECC1T1WD	568563	9.94	2290248	12.87	1566066	17.10
05 ECC1T1W MS	569467	9.95	2135854	12.87	1396954	17.11
06 ECC1T1W MSD	613968	9.94	2236589	12.88	349982*	17.10
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C  
LOW CONC. WATER SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1'64-226

SDG No.: 08367

Lab File ID (Standard): 0919601.D

Date Analyzed: 09/19/97

Instrument ID: MSD6

Time Analyzed: 08:49

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	2735943	20.65	2007405	27.07	2227801	30.42
UPPER LIMIT	5471886	21.15	4014810	27.57	4455602	30.92
LOWER LIMIT	1367972	20.15	1003702	26.57	1113900	29.92
EPA SAMPLE NO.						
01 SBLK57	2311660	20.63	1973474	27.06	2061347	30.42
02 SLCS57	2640260	20.64	2067108	27.06	753249*	30.41
03 ECC1T1W	2546015	20.63	2136385	27.06	2109839	30.42
04 ECC1T1WD	2653787	20.64	2174510	27.06	2209894	30.43
05 ECC1T1W MS	2349113	20.63	1880072	27.06	1968407	30.43
06 ECC1T1W MSD	1931733	20.64	1012332	27.06	2905*	30.41
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
\* Values outside of QC limits.

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-95-2	Phenol	5	U	
111-44-4	Bis(2-Chloroethyl)Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE

ECC1T1W

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 0836

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO. COMPOUND

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l

51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-Methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
86-74-8	Carbazole	5	U
84-74-2	Di-N-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	18	
117-84-0	Di-N-Octylphthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U
53-70-3	Dibenz(A,H)Anthracene	5	U
191-24-2	Benzo(G,H,I)Perylene	5	U

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS: DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606A.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

## CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

CAS NO.	COMPOUND			
98-86-2	Acetophenone	10	U	
930-55-2	N-Nitrosopyrrolidine	40	U	
59-89-2	N-Nitrosomorpholine	10	U	
108-39-4	3-Methylphenol	10	U	
99-65-0	1,3-Dinitrobenzene	20	U	
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	
122-39-4	Diphenylamine	10	U	
23950-58-5	Pronamide	10	U	
465-73-6	Isodrin	20	U	
140-57-8	Aramite	50	U	
510-15-6	Chlorobenzilate	10	U	
53-96-3	2-Acetylaminofluorene	20	U	

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
CLIENT SAMPLE NO.

Lab Name: IEA-NC	Method: SOW 10/92	ECC1T1W
Lab Code: IEA	Case No.: 1364-226	SDG No.: 08367
Matrix: (soil/water) WATER	Lab Sample ID: 970836701	
Sample wt/vol: 1000 (g/mL) mL	Lab File ID: 0919606B.D	
Level: (low/med) LOW	Date Received: 08/16/97	
# Moisture: decanted: (Y/N)	Date Extracted: 08/21/97	
Concentrated Extract Volume: 1000(uL)	Date Analyzed: 09/19/97	
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) N	pH:	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		ug/l	Q
100-51-6	Benzyl Alcohol			20	U
65-85-0	Benzoic Acid			50	U

1F

CLIENT SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

**CLIENT SAMPLE NO.**

ECC1T1W

Lab Name: IEA-NC

**Method:** SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

**Matrix: (soil/water)    WATER**

Lab Sample ID: 970836701

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919606.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

**CONCENTRATION UNITS:**  
(ug/L or ug/Kg)    ug/l

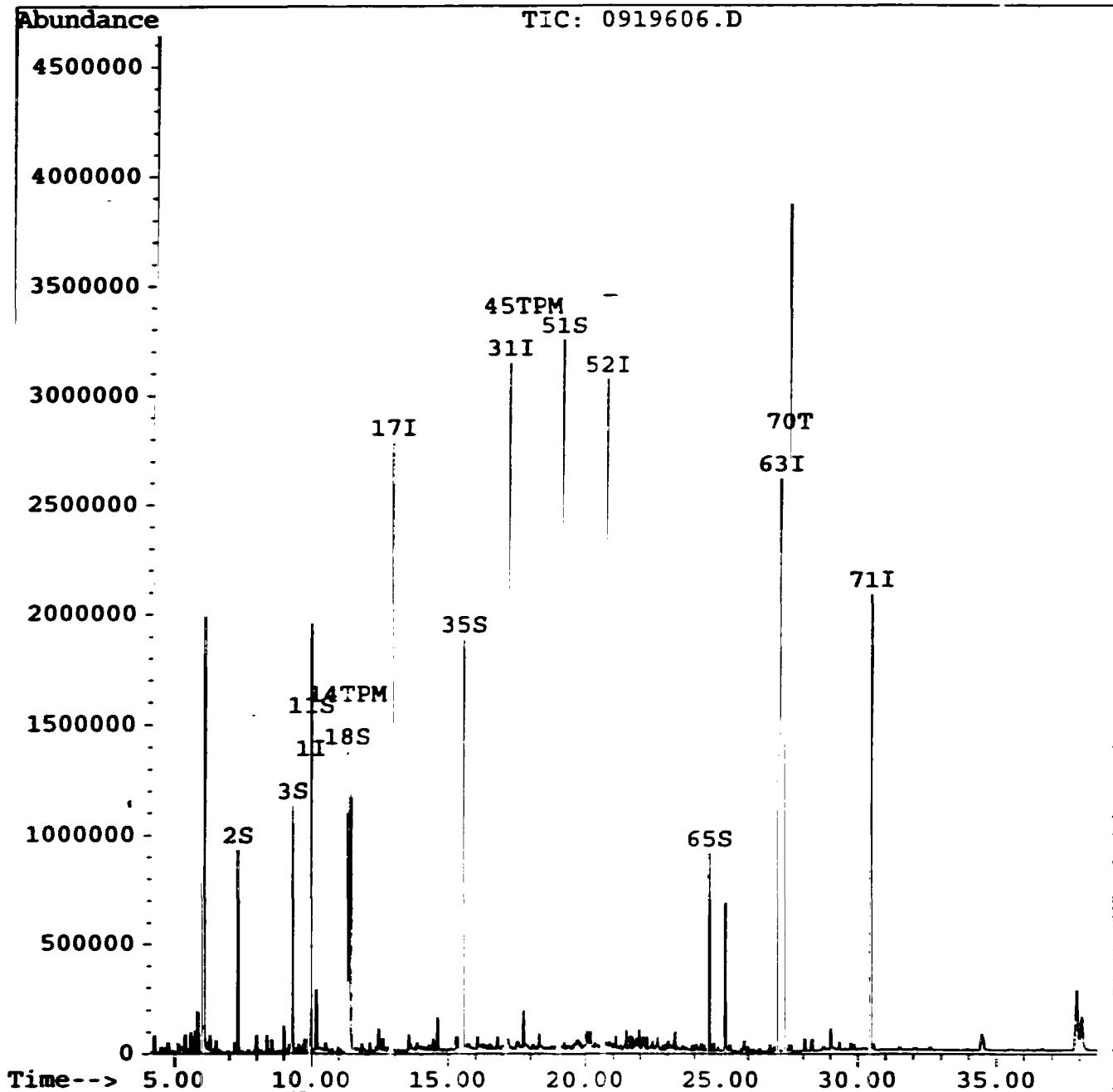
Number TICs Found: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919606.D  
Acq On : 19 Sep 97 12:50 pm  
Sample : 970836701  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 13:29 1997

Vial: 7  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919606.D                          Vial: 7  
 Acq On : 19 Sep 97 12:50 pm                          Operator: VAN LARE  
 Sample : 970836701                          Inst : MSD6  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6                          Multiplr: 1.00  
 Quant Time: Sep 19 13:29 1997

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	645632	40.00		0.00
17) Naphthalene-d8	12.86	136	2503053	40.00		0.00
31) Acenaphthene-d10	17.11	164	1553403	40.00		0.00
52) Phenanthrene-d10	20.63	188	2546015	40.00		-0.01
63) Chrysene-d12	27.06	240	2136385	40.00		0.00
71) Perylene-d12	30.42	264	2109839	40.00		0.00

## System Monitoring Compounds

System Monitoring Compounds	R.T.	QIon	Response	%Recovery
2) 2-Fluorophenol	7.30	112	564734	53.219%
3) Phenol-d5	9.29	99	816134	56.788%
7) 2-Chlorophenol-d4	0.00	132	0	0.000%
11) 1,2-Dichlorobenzene-d4	9.94	152	645860	39.36
18) Nitrobenzene-d5	11.26	82	809861	65.112%
35) 2-Fluorobiphenyl	15.51	172	1190090	55.397%
51) 2,4,6-Tribromophenol	19.03	330	803565	65.131%
65) Terphenyl-d14	24.56	244	519541	24.551%

## Target Compounds

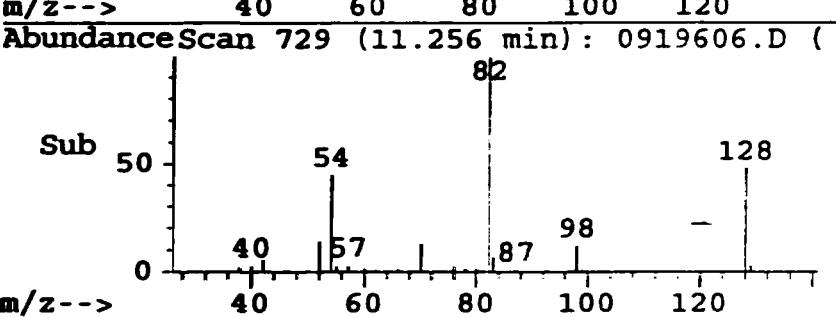
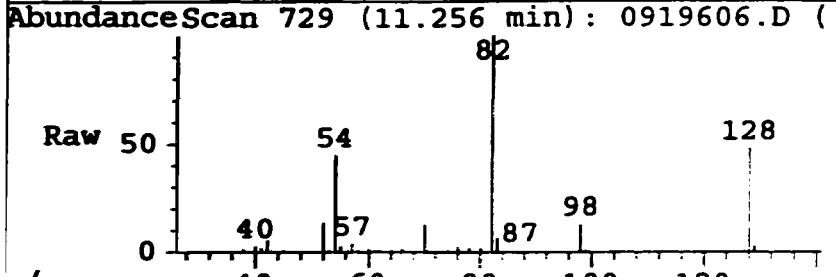
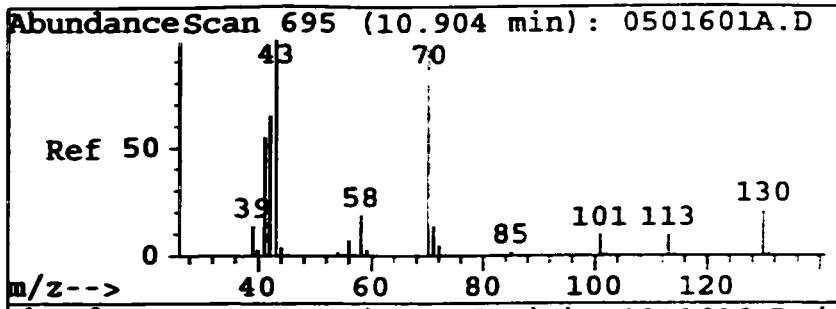
Target Compounds	R.T.	QIon	Response	Qvalue
14) N-Nitroso-di-n-propylamine	11.26	70	108236	5.12
45) 4-Nitrophenol	17.54	109	8086	0.86
70) bis(2-Ethylhexyl)phthalate	27.31	149	2521547	36.19 18

26 - a/2 kD

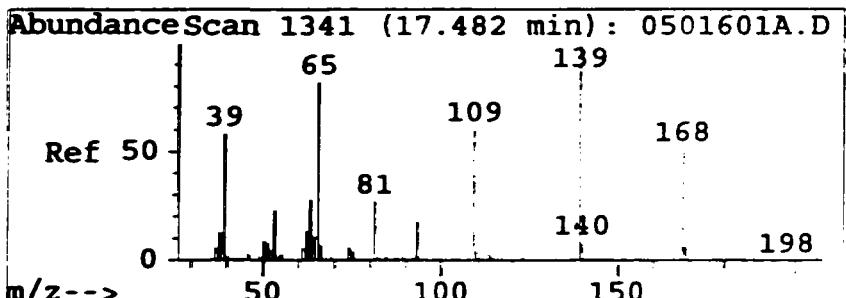
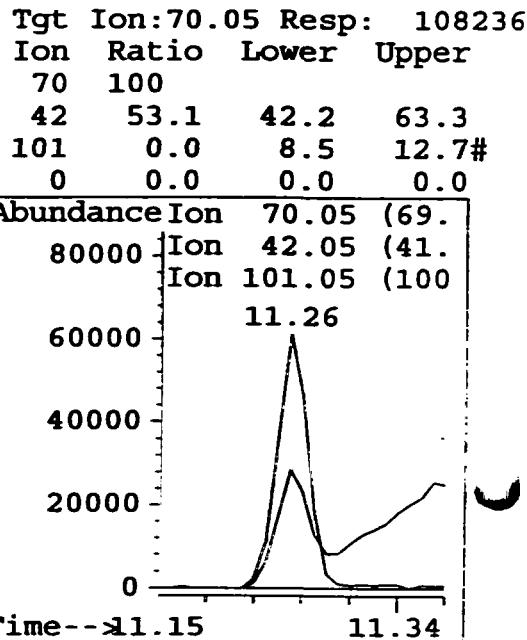
(#) = qualifier out of range (m) = manual integration  
 0919606.D CLP691.M Fri Sep 19 13:29:44 1997

MSD6

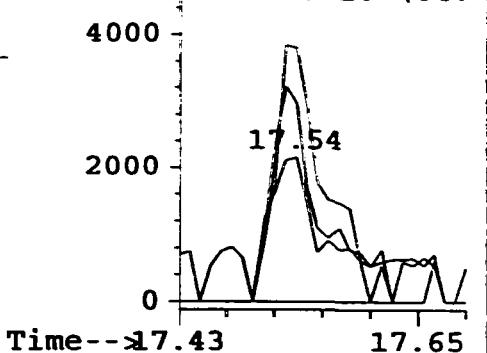
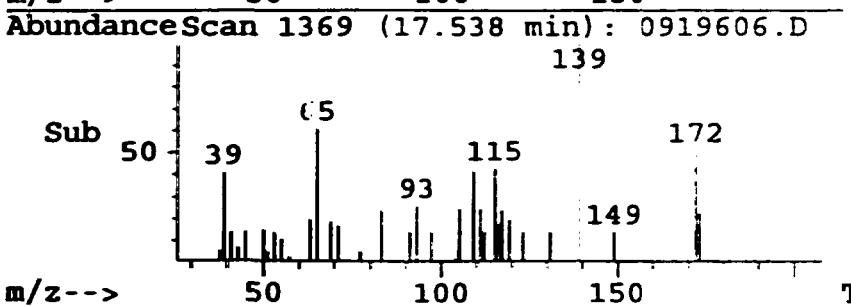
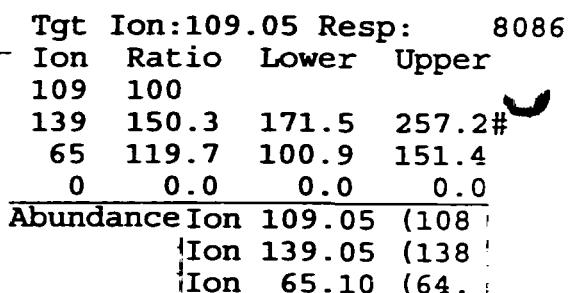
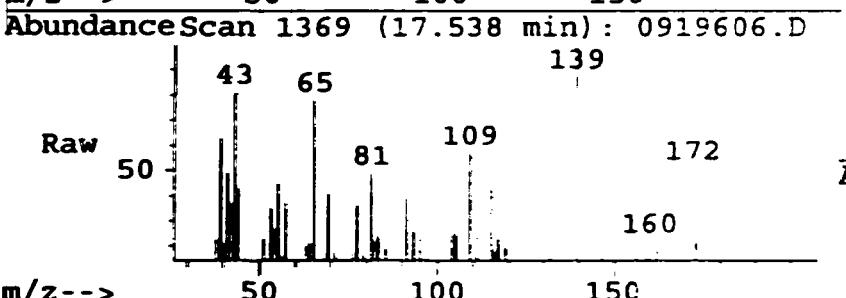
Page 1

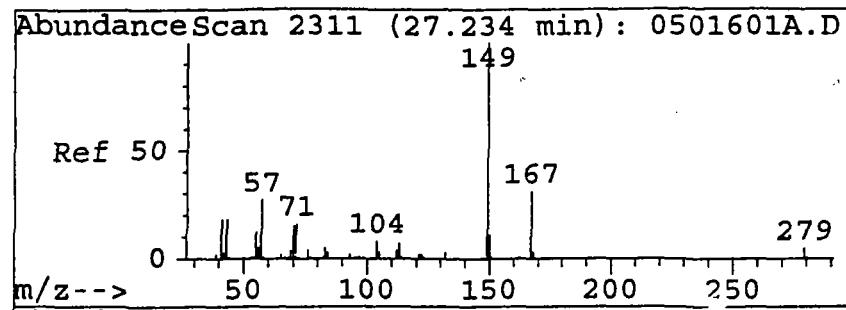


#14  
 N-Nitroso-di-n-propylamine  
 Concen: 5.12  
 RT: 11.26 min Scan# 729  
 Delta R.T. 0.26 min  
 Lab File: 0919606.D  
 Acq: 19 Sep 97 12:50 pm

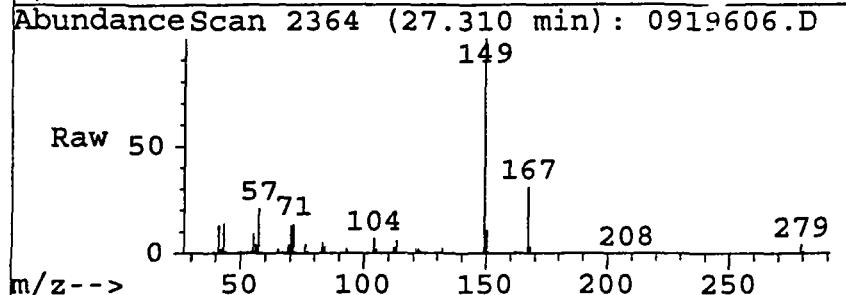


#45  
 4-Nitrophenol  
 Concen: 0.86  
 RT: 17.54 min Scan# 1369  
 Delta R.T. -0.04 min  
 Lab File: 0919606.D  
 Acq: 19 Sep 97 12:50 pm

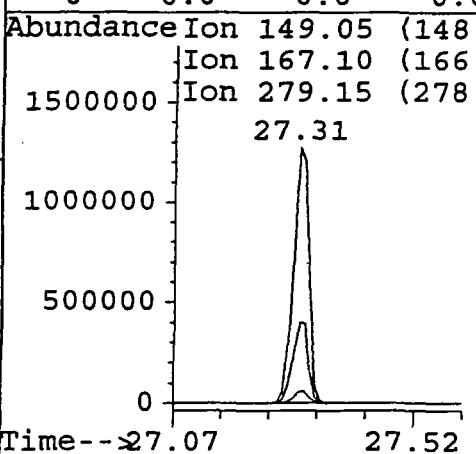
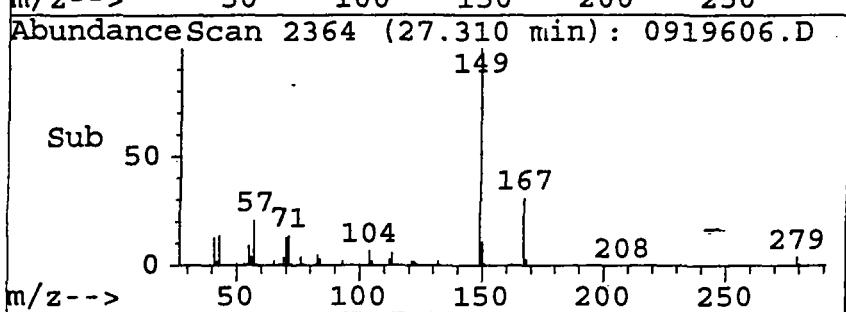




#70  
bis(2-Ethylhexyl)phthalate  
Concen: 36.19  
RT: 27.31 min Scan# 2364  
Delta R.T. -0.00 min  
Lab File: 0919606.D  
Acq: 19 Sep 97 12:50 pm



Tgt Ion	Ion Ratio	Lower	Upper
149	100		
167	31.5	25.3	37.9
279	4.4	3.5	5.2
0	0.0	0.0	0.0



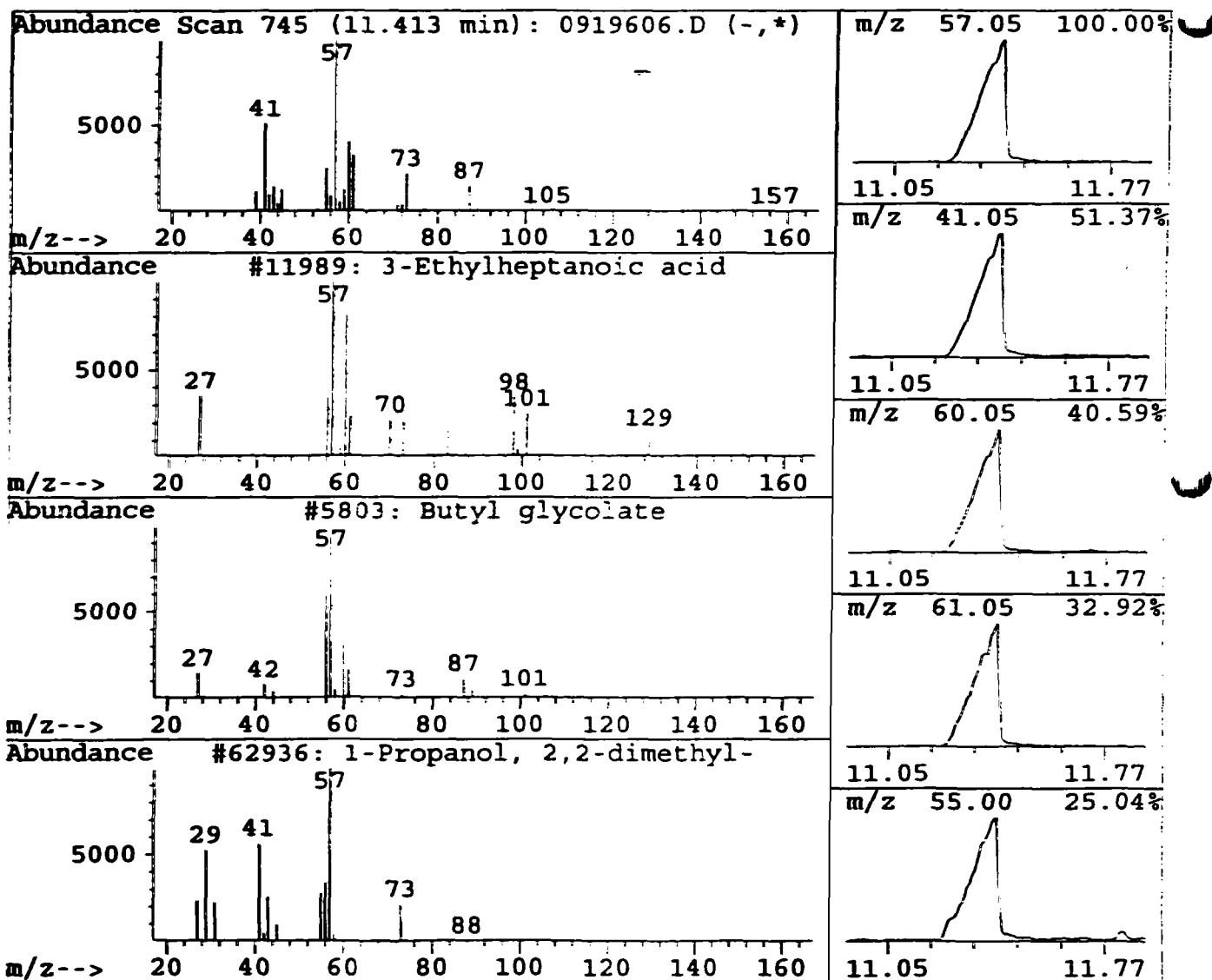
Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919606.D  
 Acq On : 19 Sep 97 12:50 pm  
 Sample : 970836701  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6

Vial: 7  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Library : C:\DATABASE\NBS75K.L

R.T.	Conc	U	Area	Relative to ISTD	R.T.	
11.41	44.01	22	6010285	Naphthalene-d8	12.86	
Hit# of 20	Tentative ID			Ref#	CAS#	Qual
1	3-Ethylheptanoic acid			11989	014272-47-0	25
2	Butyl glycolate			5803	007397-62-8	25
3	1-Propanol, 2,2-dimethyl-			62936	000075-84-3	18
4	Propanoic acid, 2,2-dimethyl-			63517	000075-98-9	12
5	Oxirane, 2,2'-(oxybis(methylene))bi			5360	002238-07-5	10



**Quantitation Report**

Data File : C:\HPCHEM\1\DATA\9709196.B\0919606A.D  
 Acq On : 19 Sep 97 12:50 pm  
 Sample : 970836701  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 14:08 1997

Vial: 7  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

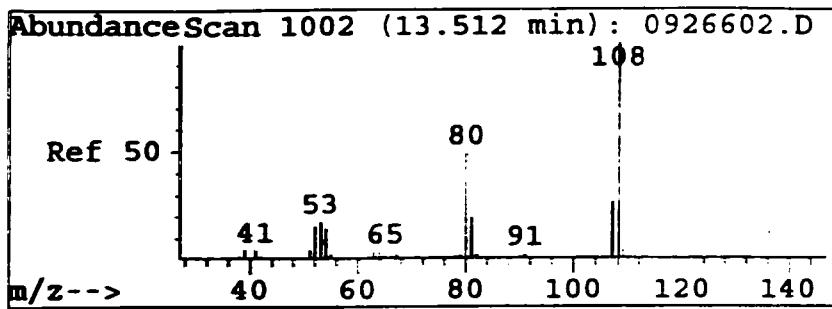
Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	645632	40.00		0.00
14) Naphthalene-d8	12.86	136	2503053	40.00		0.00
23) Acenaphthene-d10	17.11	164	1553403	40.00		0.00
35) Phenanthrene-d10	20.63	188	2546015	40.00		-0.01
52) Chrysene-d12	27.06	240	2136385	40.00		0.01
60) Perylene-d12	30.42	264	2109839	40.00		0.00

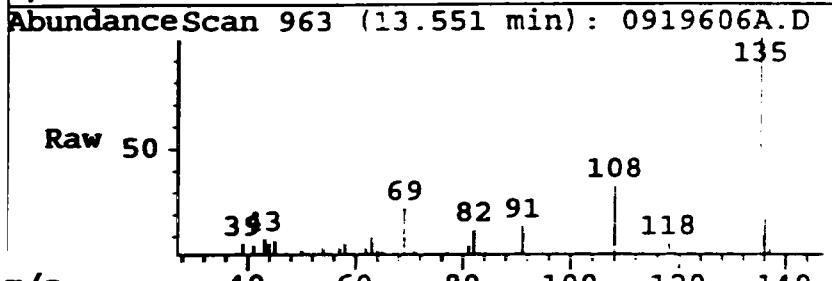
**System Monitoring Compounds** %Recovery

Target Compounds	R.T.	QIon	Response	Qvalue	#	Value
20) 1,4-Phenylenediamine	13.55	108	17300	2.04	#	41
53) Aramite	24.56	185	1047	0.93	#	43
59) Famphur	27.05	218	3838	3.25	#	30

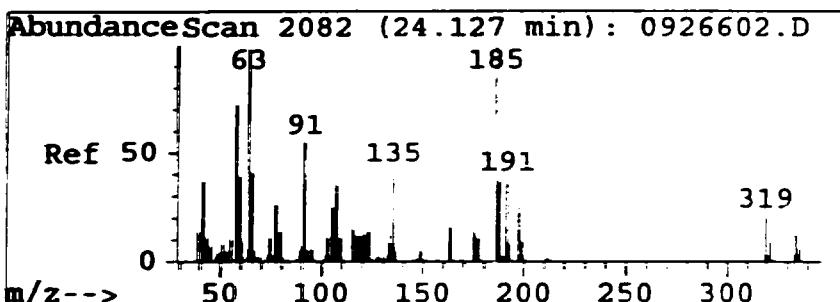
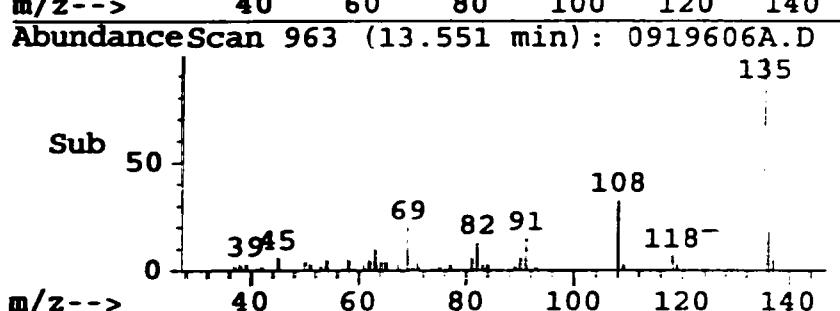
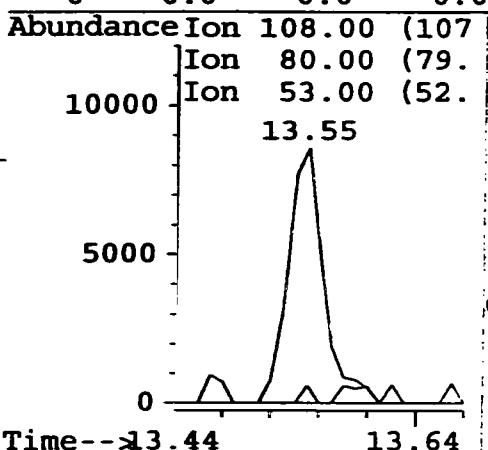
26.9/22/97



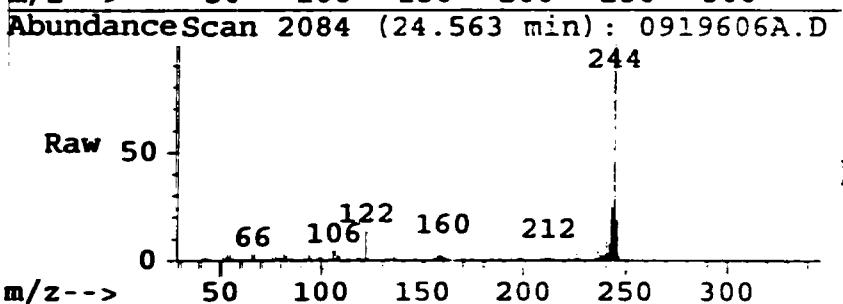
#20  
1,4-Phenylenediamine  
Concen: 2.04  
RT: 13.55 min Scan# 963  
Delta R.T. -0.41 min  
Lab File: 0919606A.D  
Acq: 19 Sep 97 12:50 pm



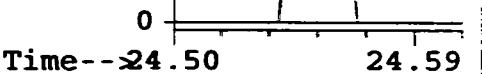
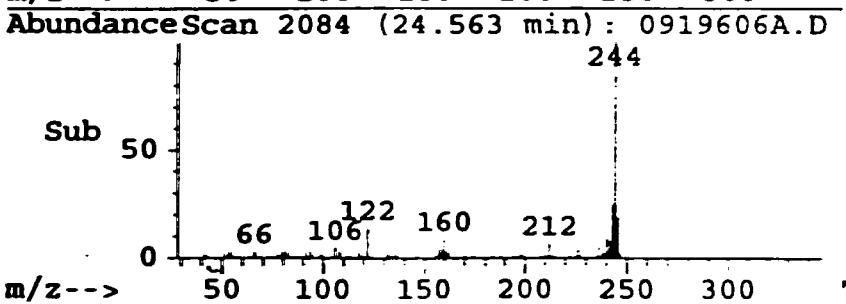
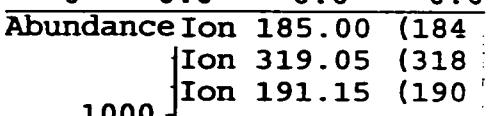
Tgt Ion:	108	Ion Ratio	Lower	Upper
108	100			
80	0.0	35.4	53.1#	
53	2.0	12.6	18.9#	
0	0.0	0.0	0.0	

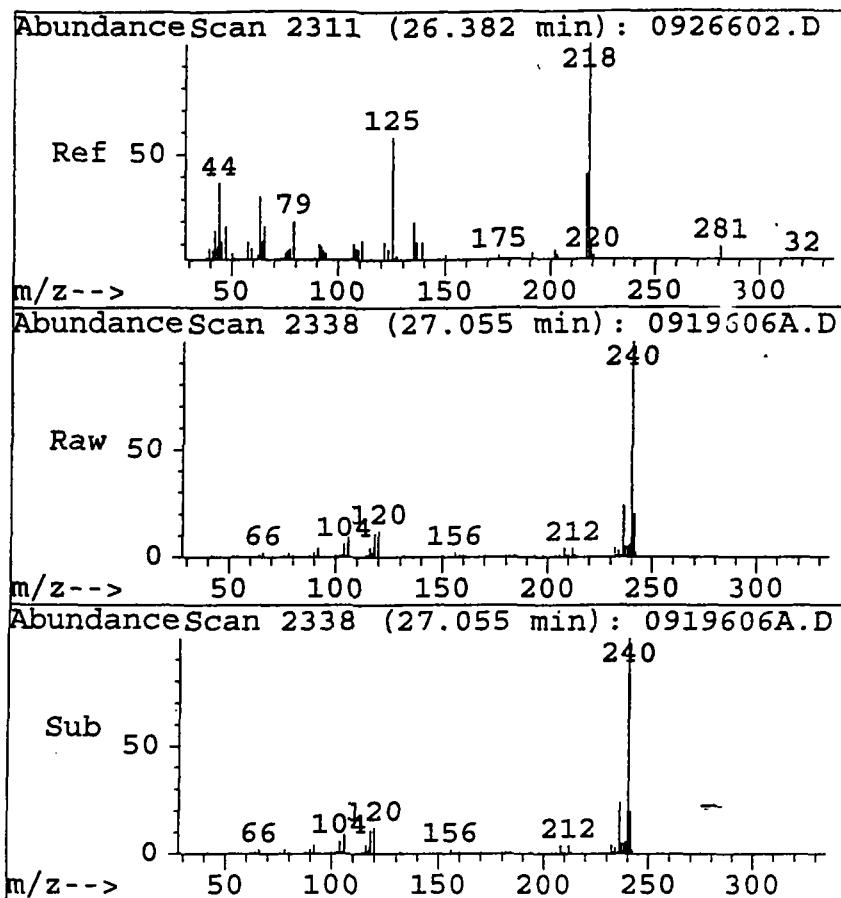


#53  
Aramite  
Concen: 0.93  
RT: 24.56 min Scan# 2084  
Delta R.T. -0.04 min  
Lab File: 0919606A.D  
Acq: 19 Sep 97 12:50 pm



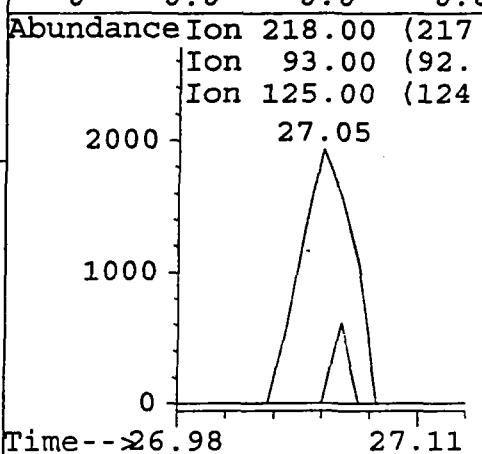
Tgt Ion:	185	Ion Ratio	Lower	Upper
185	100			
319	0.0	16.8	25.1#	
191	0.0	31.4	47.1#	
0	0.0	0.0	0.0	





#59  
 Famphur  
 Concen: 3.25  
 RT: 27.05 min Scan# 2338  
 Delta R.T. 0.18 min  
 Lab File: 0919606A.D  
 Acq: 19 Sep 97 12:50 pm

Tgt Ion: 218 Resp: 3838  
 Ion Ratio Lower Upper  
 218 100  
 93 0.0 2.7 4.0#  
 125 9.6 54.9 82.4#  
 0 0.0 0.0 0.0



**Quantitation Report**

**Data File :** C:\HPCHEM\1\DATA\9709196.B\0919606B.D  
**Acq On :** 19 Sep 97 12:50 pm  
**Sample :** 970836701  
**Misc :** WATER LOW 1X SBLK57\_082197 IEA MSD6  
**Quant Time:** Sep 19 14:11 1997

**Vial:** 7  
**Operator:** VAN LARE  
**Inst :** MSD6  
**Multiplr:** 1.00

**Method :** C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
**Title :**  
**Last Update :** Fri Sep 19 11:31:41 1997  
**Response via :** Initial Calibration

<b>Internal Standards</b>	<b>R.T.</b>	<b>QIon</b>	<b>Response</b>	<b>Conc</b>	<b>Units</b>	<b>Dev(Min)</b>
1) 1,4-dichlorobenzene-d4	9.94	152	645632	40.00		0.00
3) Naphthalene-d8	12.86	136	2503053	40.00		0.00
5) Acenaphthene-d10	17.11	164	1553403	40.00		0.00
6) Phenanthrene-d10	20.63	188	2546015	40.00		-0.01
7) Chrysene-d12	27.06	240	2136385	40.00		0.00
8) Perylene-d12	30.42	264	2109839	40.00		0.00

**System Monitoring Compounds**

\*Recovery

**Target Compounds**

Qval

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
108-95-2	Phenol	5	U	
111-44-4	Bis(2-Chloroethyl) Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC	Method: SOW 10/92	
Lab Code: IEA	Case No.: 1364-226	SDG No.: 08367
Matrix: (soil/water) WATER	Lab Sample ID: 970836702	
Sample wt/vol: 1000 (g/mL) mL	Lab File ID: 0919607.D	
Level: (low/med) LOW	Date Received: 08/16/97	
Moisture: decanted: (Y/N)	Date Extracted: 08/21/97	
Concentrated Extract Volume: 1000(uL)	Date Analyzed: 09/19/97	
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) N	pH:	

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-Methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
86-74-8	Carbazole	5	U
84-74-2	Di-N-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	Bis(2-Ethylhexyl) Phthalate	4	J
117-84-0	Di-N-Octylphthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U
53-70-3	Dibenz(A,H)Anthracene	5	U
191-24-2	Benzo(G,H,I)Perylene	5	U

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607A.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

## CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
98-86-2	Acetophenone	10	U	
930-55-2	N-Nitrosopyrrolidine	40	U	
59-89-2	N-Nitrosomorpholine	10	U	
108-39-4	3-Methylphenol	10	U	
99-65-0	1,3-Dinitrobenzene	20	U	
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	
122-39-4	Diphenylamine	10	U	
23950-58-5	Pronamide	10	U	
465-73-6	Isodrin	20	U	
140-57-8	Aramite	50	U	
510-15-6	Chlorobenzilate	10	U	
53-96-3	2-Acetylaminofluorene	20	U	

1B  
**LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

CLIENT SAMPLE NO.

ECC1T1WD

**Lab Name:** IEA-NC**Method:** SOW 10/92**Lab Code:** IEA**Case No.:** 1364-226**SDG No.:** 08367**Matrix:** (soil/water) WATER**Lab Sample ID:** 970836702**Sample wt/vol:** 1000 (g/mL) mL**Lab File ID:** 0919607B.D**Level:** (low/med) LOW**Date Received:** 08/16/97**% Moisture:** decanted: (Y/N)**Date Extracted:** 08/21/97**Concentrated Extract Volume:** 1000(uL)**Date Analyzed:** 09/19/97**Injection Volume:** 2.0 (uL)**Dilution Factor:** 1.0**GPC Cleanup:** (Y/N) N      pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		ug/l	Q
		20	50		
100-51-6	Benzyl Alcohol			20	U
65-85-0	Benzoic Acid			50	U

1F

CLIENT SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

ECC1T1WD

Lab Name: IEA-NC

**Method:** SOW 10/92

Lab Code: IEA

**Case No.:** 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836702

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919607.D

**Level:** (low/med) LOW

Date Received: 08/16/97

% Moisture:      decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs Found: 2

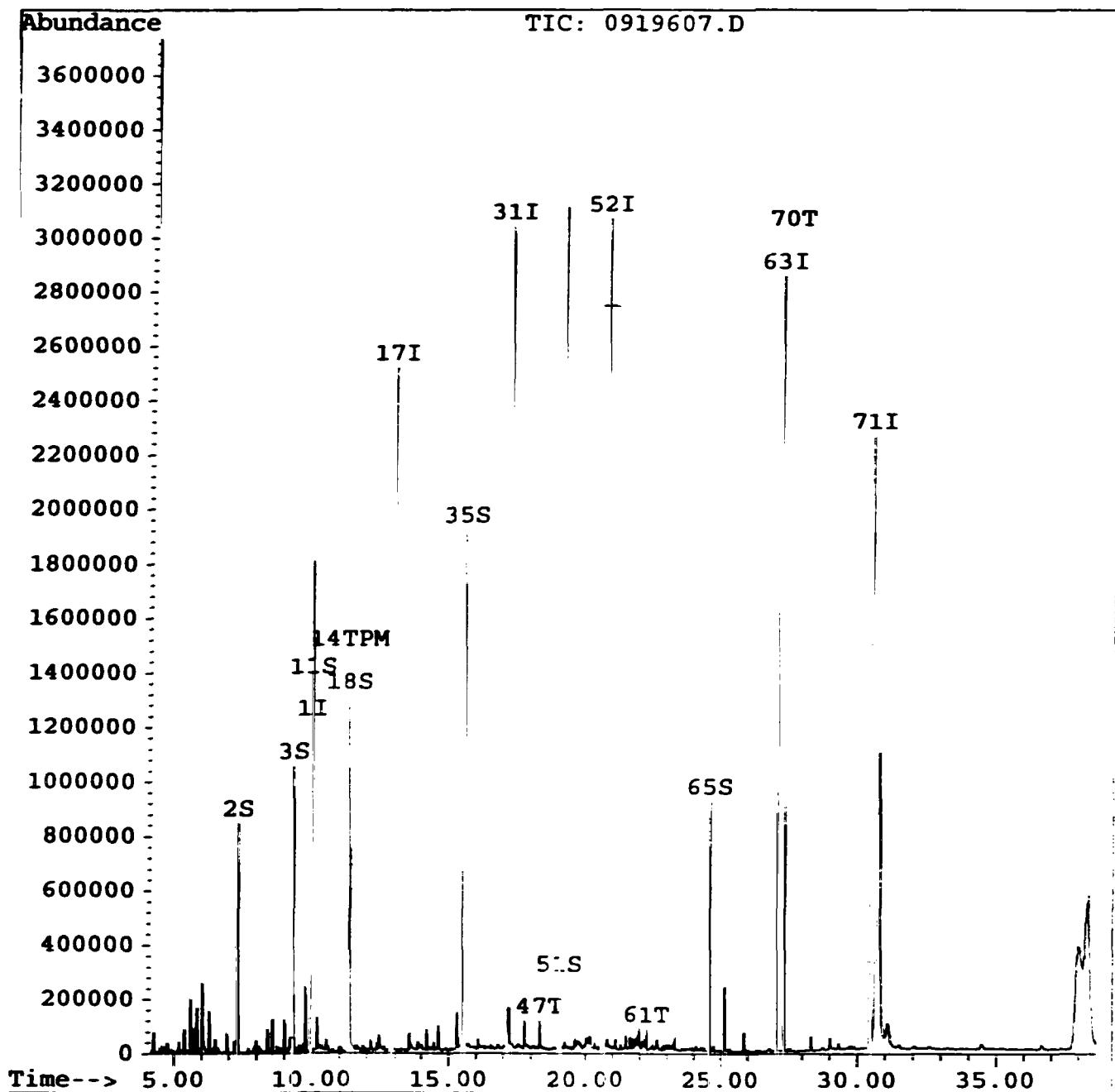
**CONCENTRATION UNITS:**  
**(ug/L or ug/Kg)    ug/l**

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919607.D  
Acq On : 19 Sep 97 1:37 pm  
Sample : 970836702  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 14:16 1997

Vial: 8  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919607.D  
 Acq On : 19 Sep 97 1:37 pm  
 Sample : 970836702  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 14:16 1997

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	568563	40.00		0.00
17) Naphthalene-d8	12.87	136	2290248	40.00		0.00
31) Acenaphthene-d10	17.10	164	1566066	40.00		0.00
52) Phenanthrene-d10	20.64	188	2653787	40.00		0.00
63) Chrysene-d12	27.06	240	2174510	40.00		0.00
71) Perylene-d12	30.43	264	2209894	40.00		0.00

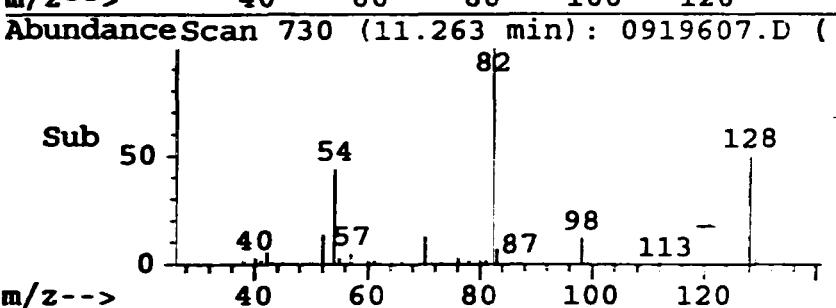
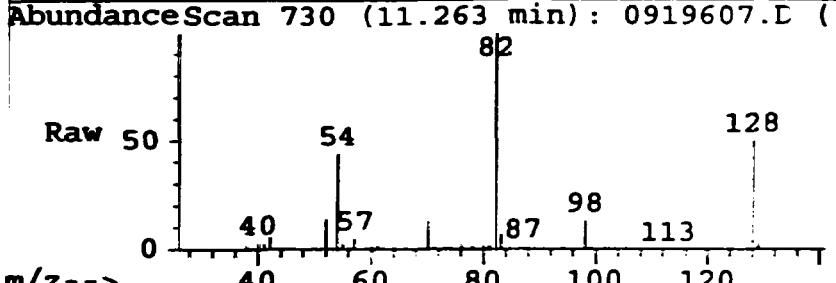
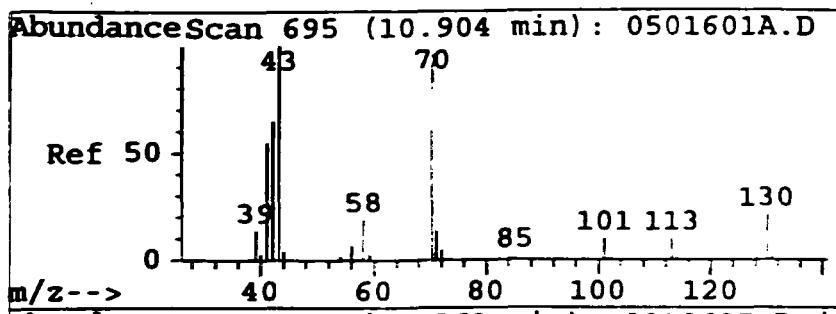
## System Monitoring Compounds

				%Recovery
2) 2-Fluorophenol	7.29	112	509367	54.508%
3) Phenol-d5	9.29	99	771319	60.944%
7) 2-Chlorophenol-d4	0.00	132	0	0.000%
11) 1,2-Dichlorobenzene-d4	9.94	152	568741	39.36
18) Nitrobenzene-d5	11.26	82	793125	27.88
35) 2-Fluorobiphenyl	15.51	172	1179799	21.79
51) 2,4,6-Tribromophenol	19.03	330	770291	74.32
65) Terphenyl-d14	24.56	244	561728	10.43

## Target Compounds

				Qvalue
14) N-Nitroso-di-n-propylamine	11.26	70	103931	5.58
47) Diethylphthalate	18.32	149	58988	0.02
61) Di-n-butylphthalate	22.26	149	85182	0.83
70) bis(2-Ethylhexyl)phthalate	27.31	149	535185	7.55 4

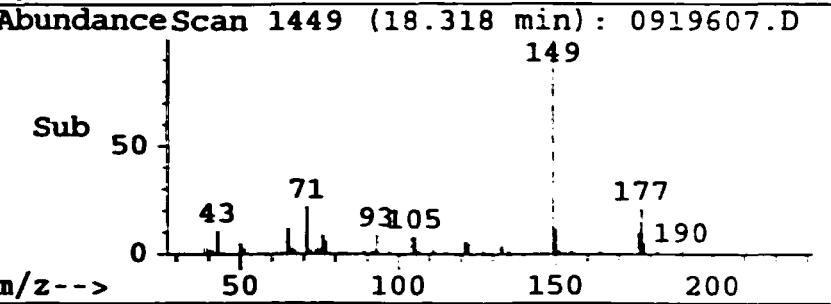
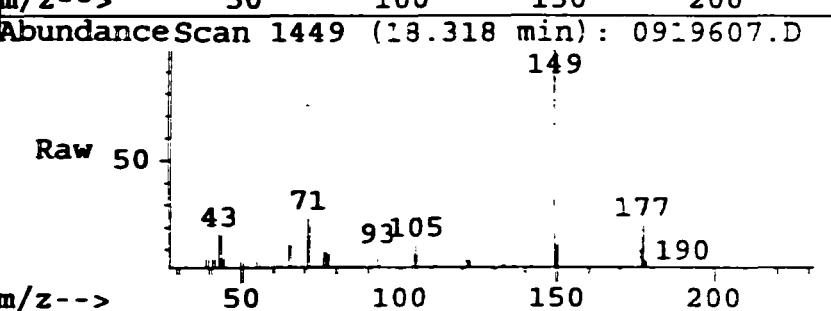
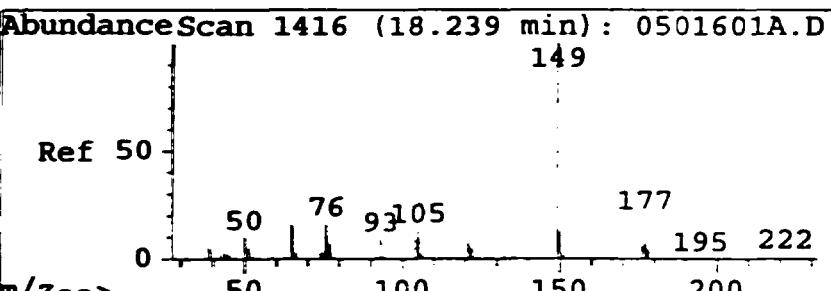
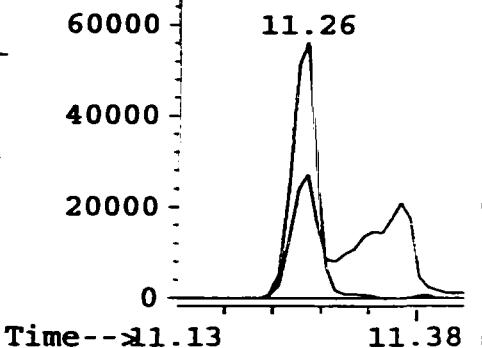
22 9/22/97



#14  
N-Nitroso-di-n-propylamine  
Concen: 5.58  
RT: 11.26 min Scan# 730  
Delta R.T. 0.26 min  
Lab File: 0919607.D  
Acq: 19 Sep 97 1:37 pm

Tgt Ion: 70.05 Resp: 103931  
Ion Ratio Lower Upper  
70 100  
42 56.6 42.2 63.3  
101 0.0 8.5 12.7#  
0 0.0 0.0 0.0

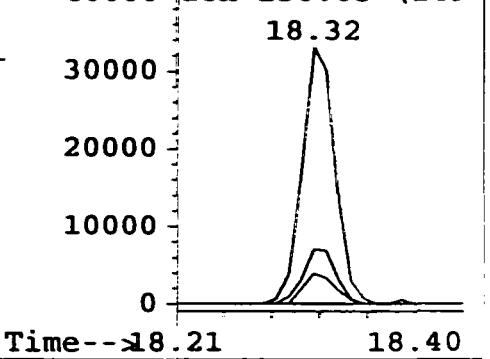
Abundance Ion 70.05 (69.  
Ion 42.05 (41.  
Ion 101.05 (100

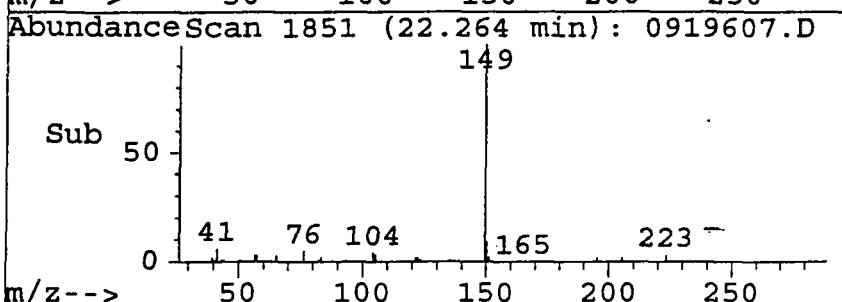
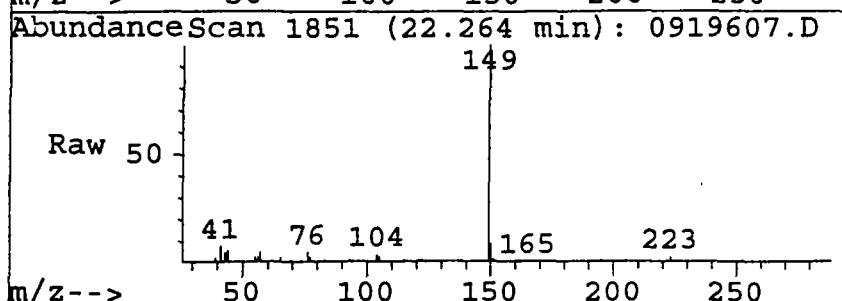
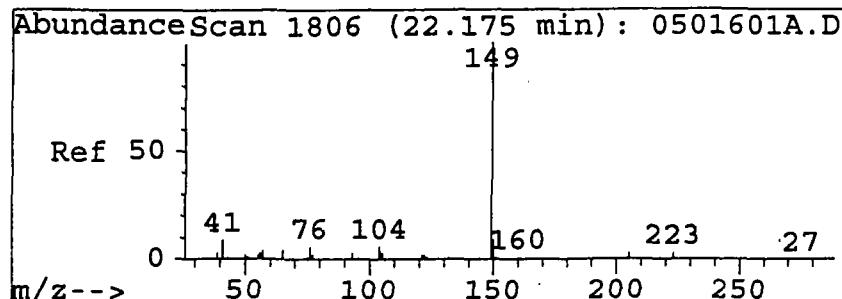


#47  
Diethylphthalate  
Concen: 0.82  
RT: 18.32 min Scan# 1449  
Delta R.T. -0.04 min  
Lab File: 0919607.D  
Acq: 19 Sep 97 1:37 pm

Tgt Ion: 149.05 Resp: 58988  
Ion Ratio Lower Upper  
149 100  
177 21.3 15.2 22.7  
150 11.1 9.5 14.2  
0 0.0 0.0 0.0

Abundance Ion 149.05 (148  
Ion 177.10 (176  
Ion 150.05 (149

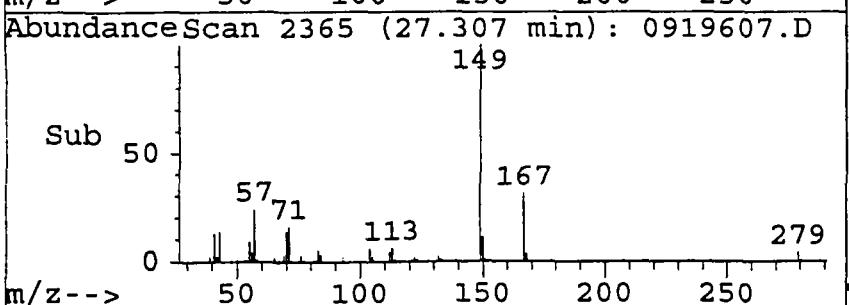
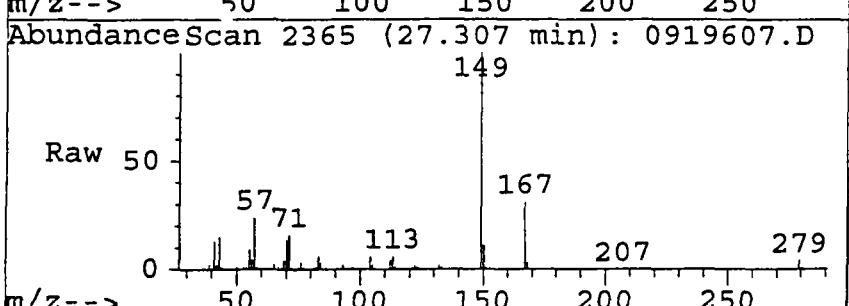
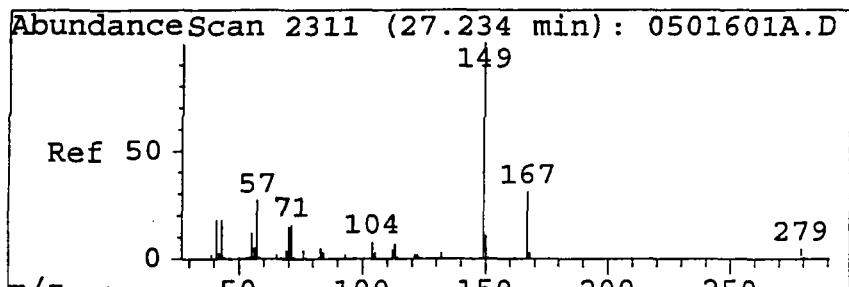
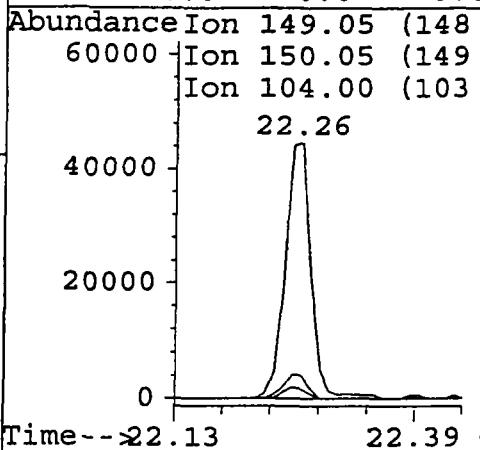




#61  
Di-n-butylphthalate  
Concen: 0.83  
RT: 22.26 min Scan# 1851  
Delta R.T. -0.00 min  
Lab File: 0919607.D  
Acq: 19 Sep 97 1:37 pm

Tgt Ion: 149.05 Resp: 85182

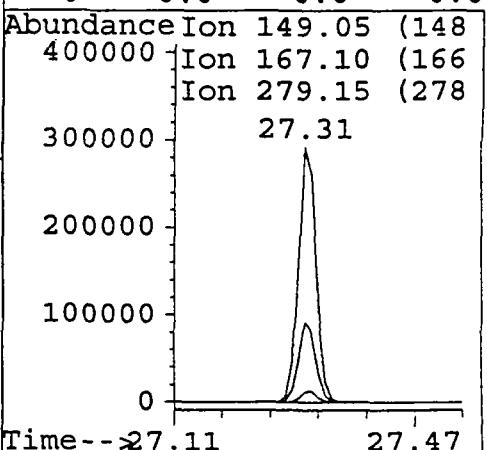
	Ion Ratio	Lower	Upper
149	100		
150	8.9	7.7	11.6
104	4.0	3.6	5.3
0	0.0	0.0	0.0



#70  
bis(2-Ethylhexyl)phthalate  
Concen: 7.55  
RT: 27.31 min Scan# 2365  
Delta R.T. -0.00 min  
Lab File: 0919607.D  
Acq: 19 Sep 97 1:37 pm

Tgt Ion: 149.05 Resp: 535185

	Ion Ratio	Lower	Upper
149	100		
167	31.0	25.3	37.9
279	4.3	3.5	5.2
0	0.0	0.0	0.0



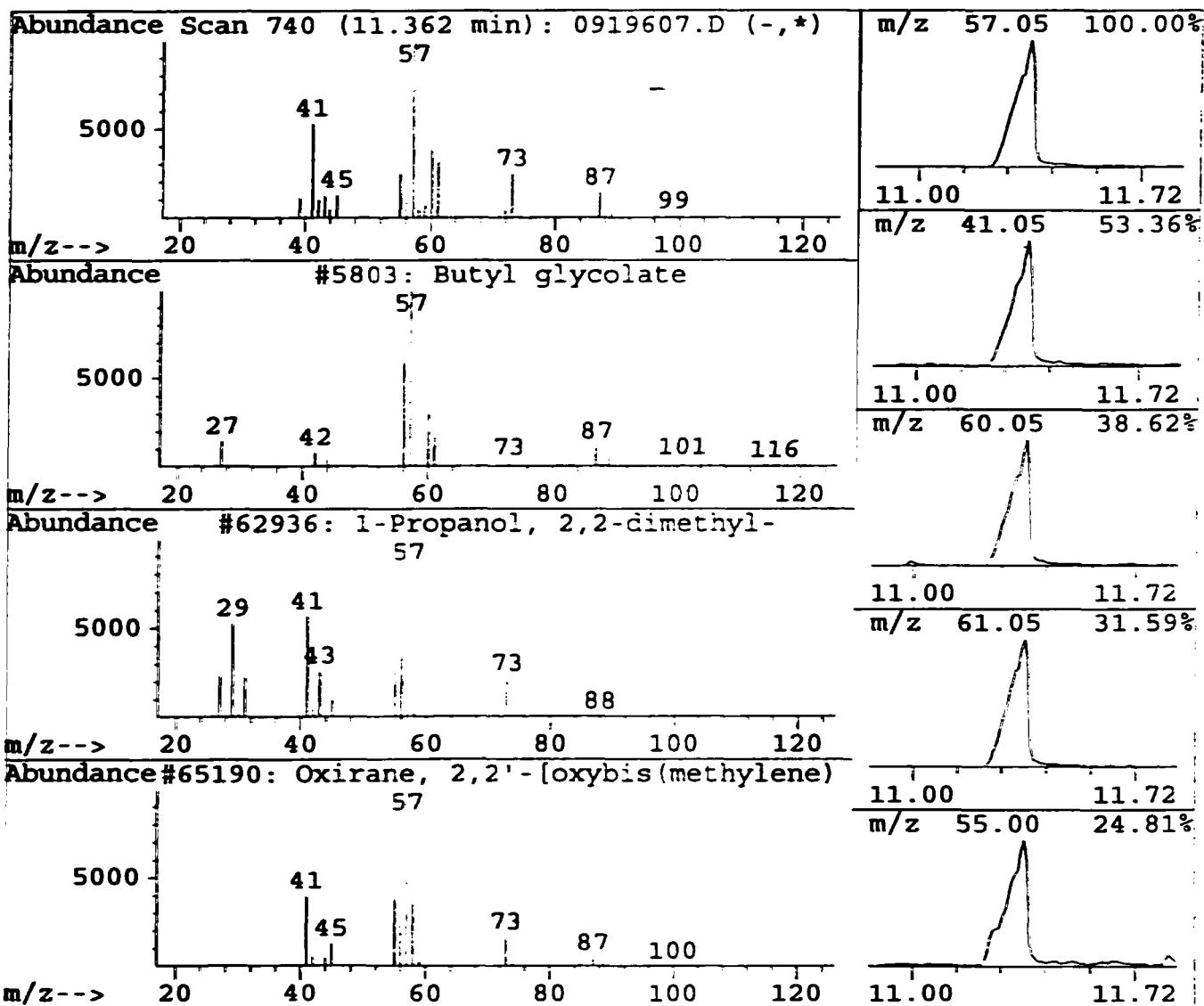
Data File : C:\HPCHEM\1\DATA\9709196.B\0919607.D  
 Acq On : 19 Sep 97 1:37 pm  
 Sample : 970836702  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Library : C:\DATABASE\NBS75K.L

R.T.	Conc	U	Area	Relative to ISTD	R.T.
11.36	32.38	lv	2696689	1,4-dichlorobenzene-d4	9.94

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Butyl glycolate		5803	007397-62-8	25
2 1-Propanol, 2,2-dimethyl-		62936	000075-84-3	22
3 Oxirane, 2,2'-(oxybis(methylene))bi		65190	002238-07-5	12
4 Propanoic acid, 2,2-dimethyl-		63517	000075-98-9	12
5 1-Propanamine, 3-methoxy-		882	005332-73-0	9



## Library Search Compound Report

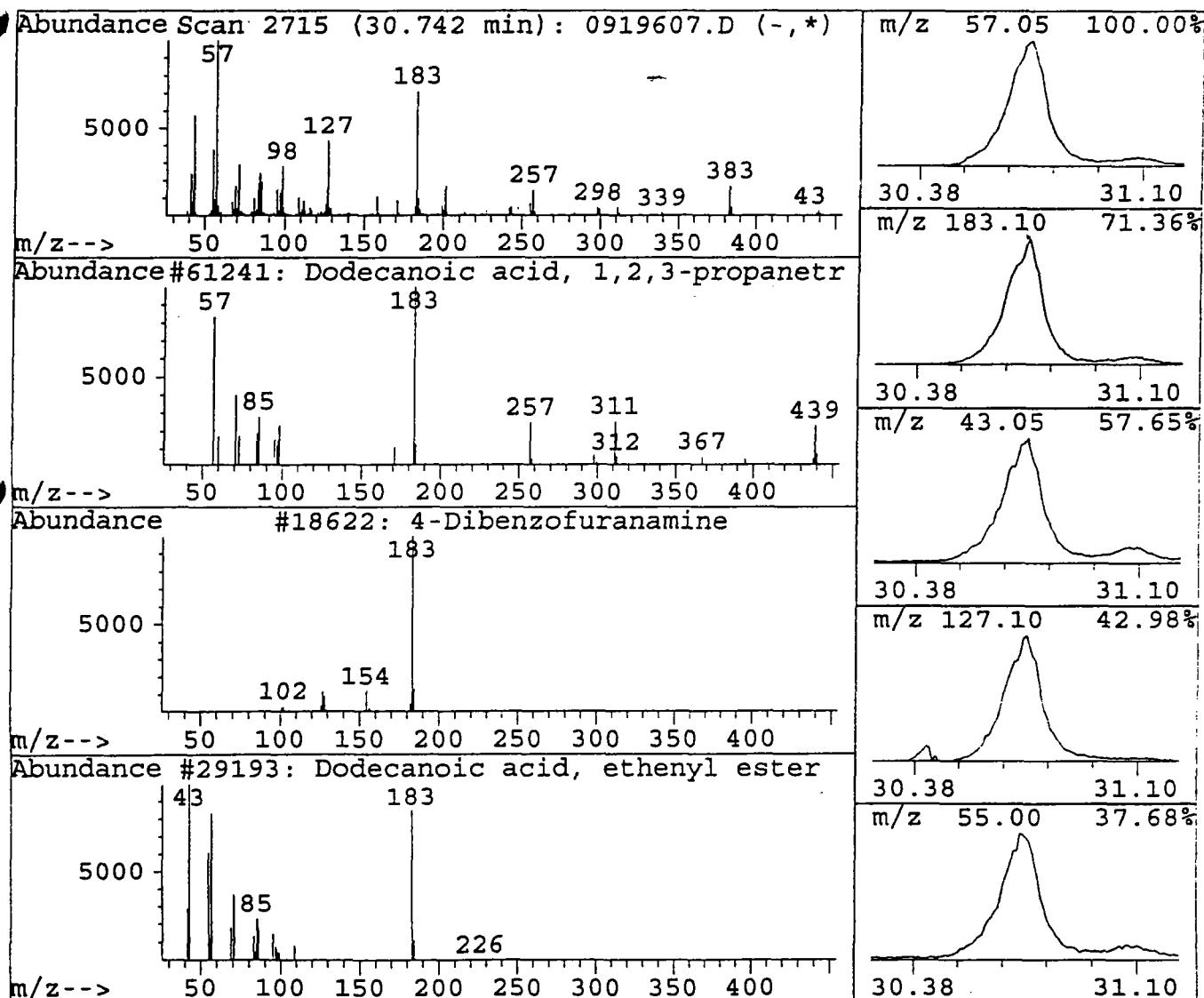
Data File : C:\HPCHEM\1\DATA\9709196.B\0919607.D  
 Acq On : 19 Sep 97 1:37 pm  
 Sample : 970836702  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Library : C:\DATABASE\NBS75K.L

R.T.	Conc	U	Area	Relative to ISTD	R.T.
30.74	59.93	30	9483820	Perylene-d12	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecanoic acid, 1,2,3-propanetriyl	61241	000538-24-9	38
2	4-Dibenzofuranamine	18622	050548-43-1	37
3	Dodecanoic acid, ethenyl ester	29193	002146-71-6	25
4	2H-Azepin-2-one, hexahydro-6-methyl	4764	006142-55-8	16
5	(E)-4,6-Dioxohept-2-enoic acid, di-	42697	000000-00-0	14



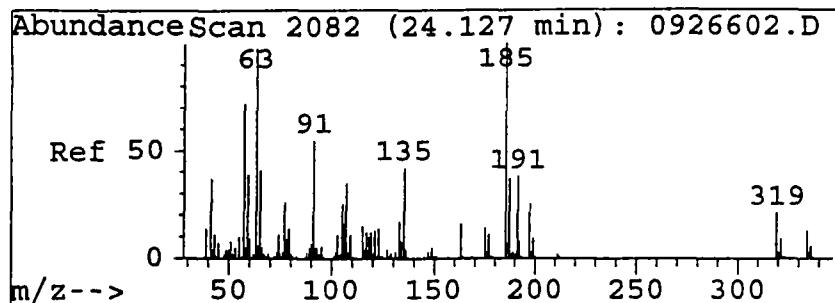
Data File : C:\HPCHEM\1\DATA\9709196.B\0919607A.D Vial: 8  
Acq On : 19 Sep 97 1:37 pm Operator: VAN LARE  
Sample : 970836702 Inst : MSD6  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6 Multiplr: 1.00  
Quant Time: Sep 19 14:31 1997

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
Title :  
Last Update : Fri Sep 19 11:51:21 1997  
Response via : Continuing Calibration

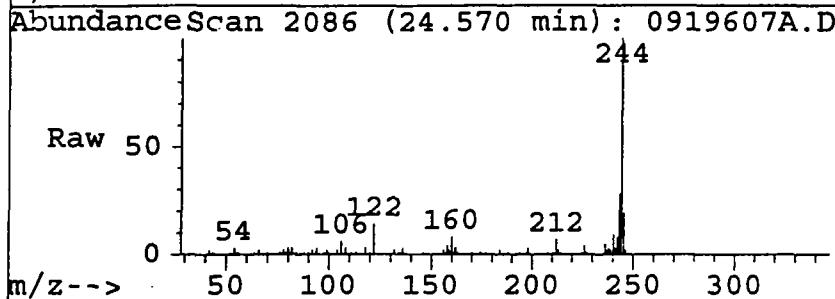
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	568563	40.00		0.00
14) Naphthalene-d8	12.87	136	2290248	40.00		0.00
23) Acenaphthene-d10	17.10	164	1566066	40.00		0.00
35) Phenanthrene-d10	20.64	188	2653787	40.00		0.00
52) Chrysene-d12	27.06	240	2174510	40.00		0.01
60) Perylene-d12	30.43	264	2209894	40.00		0.01

System Monitoring Compounds %Recovery

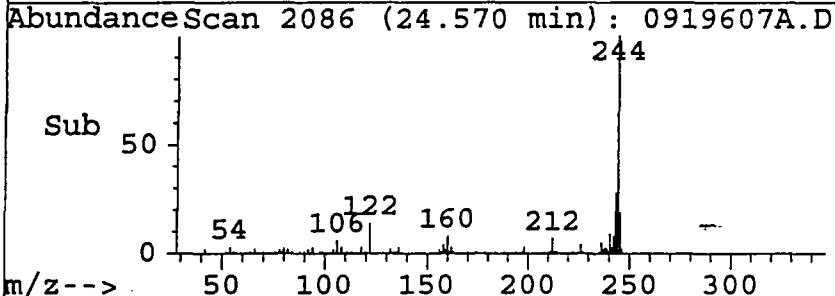
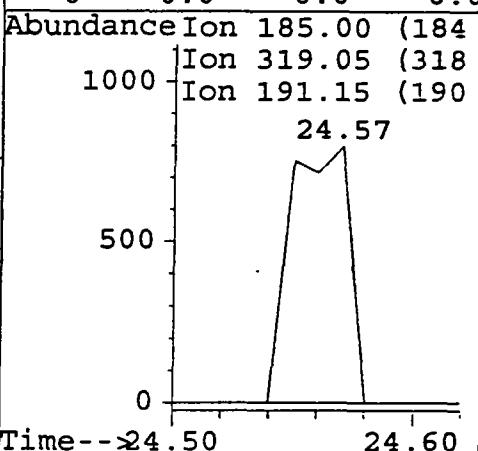
Target Compounds				%Recovery	Qual.
53) Aramite	24.57	185	1342	1.17	# 4
59) Famphur	27.06	218	4035	3.36	# 32



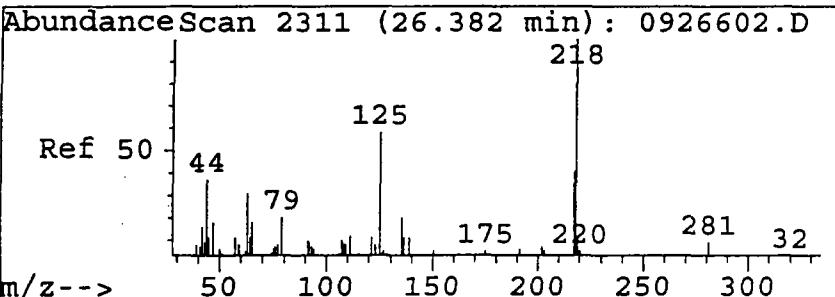
#53  
Aramite  
Concen: 1.17  
RT: 24.57 min Scan# 2086  
Delta R.T. -0.03 min  
Lab File: 0919607A.D  
Acq: 19 Sep 97 1:37 pm



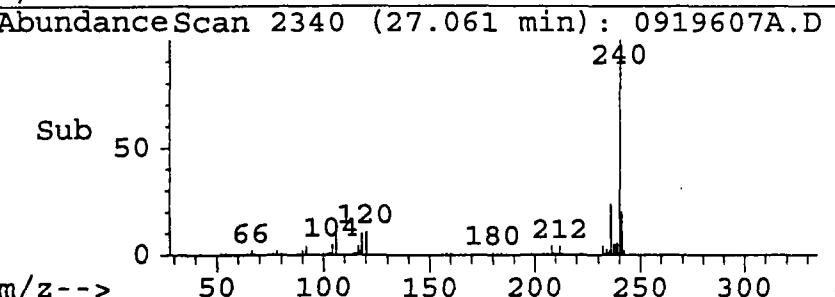
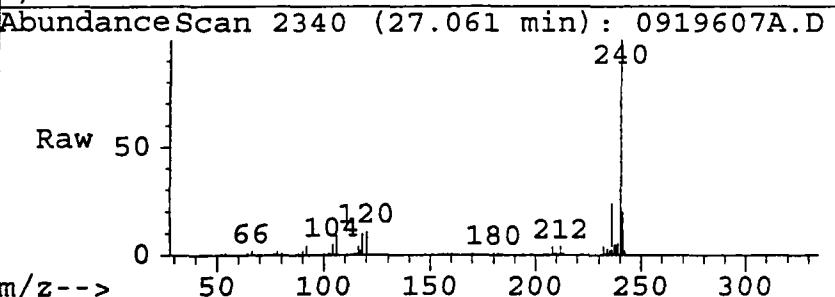
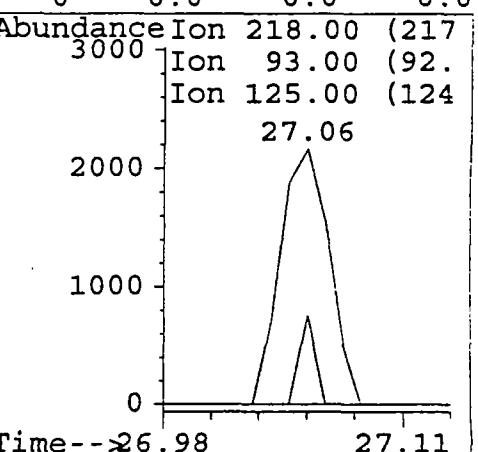
Tgt	Ion	185	1342
Ion	Ratio	Lower	Upper
185	100		
319	0.0	16.8	25.1#
191	0.0	31.4	47.1#
0	0.0	0.0	0.0



#59  
Famphur  
Concen: 3.36  
RT: 27.06 min Scan# 2340  
Delta R.T. 0.19 min  
Lab File: 0919607A.D  
Acq: 19 Sep 97 1:37 pm



Tgt	Ion	218	4035
Ion	Ratio	Lower	Upper
218	100		
93	0.0	2.7	4.0#
125	11.3	54.9	82.4#
0	0.0	0.0	0.0



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919607B.D  
 Acq On : 19 Sep 97 1:37 pm  
 Sample : 970836702  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 14:30 1997

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
 Title :  
 Last Update : Fri Sep 19 11:31:41 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	568563	40.00		0.00
3) Naphthalene-d8	12.87	136	2290248	40.00		0.00
5) Acenaphthene-d10	17.10	164	1566066	40.00		0.00
6) Phenanthrene-d10	20.64	188	2653787	40.00		0.00
7) Chrysene-d12	27.06	240	2174510	40.00		0.00
8) Perylene-d12	30.43	264	2209894	40.00		0.00

## System Monitoring Compounds

#Recovery

## Target Compounds

4) Benzoic acid

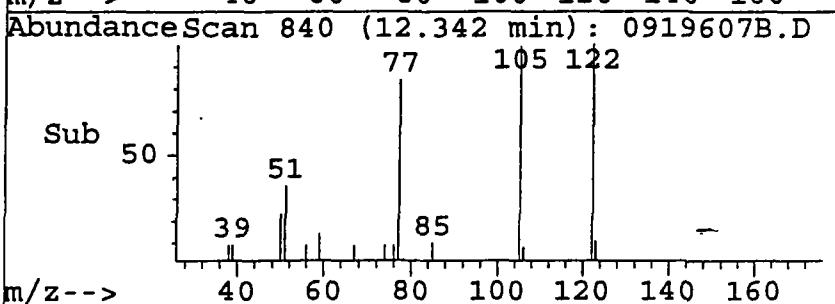
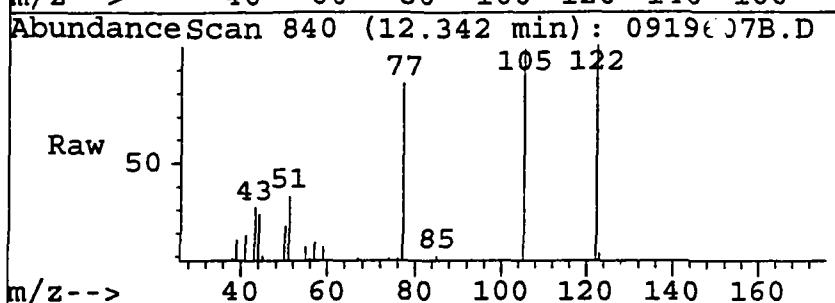
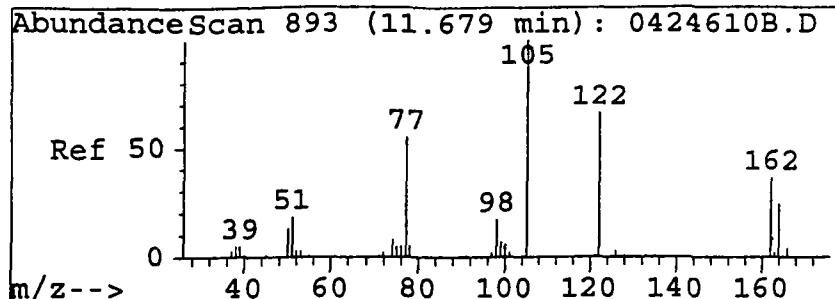
12.34 122

16082

0.84 %

Qva 92

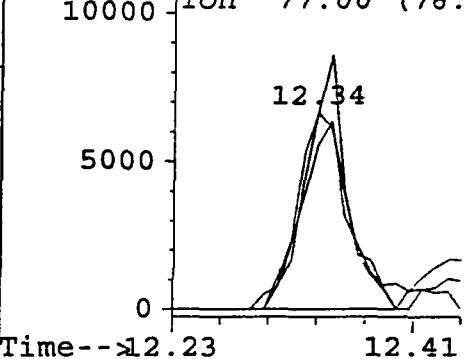
Dk 9/22/97



#4  
 Benzoic acid  
 Concen: 0.84  
 RT: 12.34 min Scan# 840  
 Delta R.T. -0.18 min  
 Lab File: 0919607B.D  
 Acq: 19 Sep 97 1:37 pm

Tgt Ion:122 Resp: 16082  
 Ion Ratio Lower Upper  
 122 100  
 105 117.9 97.7 146.6  
 77 102.7 71.2 106.7  
 0 0.0 0.0 0.0

Abundance Ion 122.00 (121)  
 Ion 105.00 (104)  
 Ion 77.00 (76).



6B  
LOW CONC. WATER SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD6

Calibration Date(s): 09/18/97 09/18/97  
Calibration Times: 10:24 13:36

LAB FILE ID:	RRF20 = 0918603.D	RRF50 = 0918604.D
	RRF80 = 0918601.D	RRF120= 0918605.D
		RRF160= 0918602.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol	* 2.328	2.300	1.867	1.709	1.714	1.984	15.5*
Bis(2-Chloroethyl) Ether	* 1.801	1.909	1.704	1.453	1.396	1.653	13.4*
2-Chlorophenol	* 1.559	1.471	1.422	1.313	1.302	1.413	7.7*
1,3-Dichlorobenzene	1.591	1.625	1.634	1.375	1.352	1.515	9.2
1,4-Dichlorobenzene	1.677	1.639	1.571	1.365	1.368	1.524	8
1,2-Dichlorobenzene	1.613	1.505	1.443	1.364	1.314	1.448	1
2-Methylphenol	* 1.616	1.638	1.509	1.418	1.423	1.521	6.8*
2,2'-oxybis(1-Chloropropane)	2.194	2.370	1.857	1.915	1.815	2.030	11.8
4-Methylphenol	* 1.783	1.884	1.614	1.585	1.386	1.650	11.7*
N-Nitroso-Di-N-Propylamine	* 1.715	1.639	1.464	1.451	1.243	1.503	12.2*
Hexachloroethane	* 0.721	0.721	0.687	0.690	0.628	0.689	5.5*
Nitrobenzene	* 0.496	0.507	0.463	0.427	0.388	0.456	10.8*
Isophorone	* 1.241	1.197	1.096	1.039	0.898	1.094	12.4*
2-Nitrophenol	* 0.243	0.261	0.268	0.238	0.215	0.245	8.5*
2,4-Dimethylphenol	* 0.437	0.438	0.456	0.426	0.388	0.429	5.9*
Bis(2-Chloroethoxy)Methane	* 0.655	0.699	0.765	0.544	0.472	0.627	18.9*
2,4-Dichlorophenol	* 0.337	0.360	0.406	0.316	0.298	0.343	12.2*
1,2,4-Trichlorobenzene	* 0.325	0.323	0.367	0.290	0.258	0.312	13.1*
Naphthalene	* 1.225	1.020	1.026	0.992	0.874	1.028	12.3*
4-Chloroaniline	0.586	0.572	0.538	0.495	0.432	0.525	11.9
Hexachlorobutadiene	0.157	0.157	0.182	0.154	0.148	0.160	8.3
4-Chloro-3-Methylphenol	* 0.442	0.480	0.487	0.398	0.341	0.430	14.2*
2-Methylnaphthalene	* 0.805	0.736	0.733	0.619	0.594	0.697	12.7*
Hexachlorocyclopentadiene	0.289	0.330	0.435	0.315	0.298	0.333	11
2,4,6-Trichlorophenol	* 0.426	0.436	0.526	0.382	0.347	0.424	15.9*
2,4,5-Trichlorophenol	* 0.434	0.412	0.436	0.401	0.384	0.414	5.3*
2-Chloronaphthalene	* 1.293	1.346	1.278	1.091	1.010	1.203	12.1*
2-Nitroaniline	0.529	0.480	0.467	0.454	0.414	0.469	9.0
Dimethylphthalate	1.713	1.722	1.934	1.453	1.341	1.633	14.5
Acenaphthylene	* 2.183	2.198	2.262	1.736	1.564	1.989	15.9*
2,6-Dinitrotoluene	* 0.352	0.400	0.400	0.388	0.331	0.374	8.3*
3-Nitroaniline	0.479	0.461	0.449	0.430	0.411	0.446	6.0
Acenaphthene	* 1.286	1.166	1.237	1.082	1.011	1.156	9.7*
2,4-Dinitrophenol	0.217	0.243	0.236	0.260	0.229	0.237	6.8
4-Nitrophenol	0.258	0.276	0.284	0.258	0.236	0.262	7.1
Dibenzofuran	* 1.804	1.746	1.843	1.538	1.457	1.678	10.2*
2,4-Dinitrotoluene	* 0.542	0.587	0.611	0.536	0.504	0.556	7.7*

\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

6C  
LOW CONC. WATER SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD6

Calibration Date(s): 09/18/97 09/18/97  
Calibration Times: 10:24 13:36

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
LAB FILE ID:	RRF20 = 0918603.D	RRF50 = 0918604.D					
	RRF80 = 0918601.D	RRF120= 0918605.D	RRF160= 0918602.D				
Diethylphthalate	1.967	2.007	2.124	1.564	1.469	1.826	15.9
4-Chlorophenyl-phenylether	* 0.611	0.576	0.583	0.538	0.494	0.560	8.1*
Fluorene	* 1.556	1.440	1.550	1.266	1.204	1.403	11.5*
4-Nitroaniline	0.539	0.553	0.549	0.521	0.485	0.529	5.2
6-Dinitro-2-Methylphenol	0.164	0.177	0.156	0.171	0.156	0.165	5.5
N-Nitrosodiphenylamine (1)	0.597	0.609	0.574	0.509	0.468	0.551	11.0
4-Bromophenyl-phenylether	* 0.175	0.174	0.179	0.158	0.156	0.168	6.4*
Hexachlorobenzene	* 0.219	0.224	0.239	0.216	0.195	0.219	7.3*
Pentachlorophenol	* 0.165	0.168	0.165	0.152	0.156	0.161	4.1*
Phenanthrene	* 1.116	1.099	1.092	0.968	0.891	1.033	9.6*
Anthracene	* 1.143	1.118	1.041	0.940	0.868	1.022	11.4*
Carbazole	1.210	1.198	1.089	0.973	0.929	1.080	11.8
Di-N-Butylphthalate	1.761	1.793	1.752	1.388	1.242	1.587	16.0
Fluoranthene	* 1.144	1.109	1.108	0.939	0.951	1.050	9.3*
Pyrene	* 1.778	1.794	1.780	1.495	1.486	1.667	9.7*
Butylbenzylphthalate	1.275	1.287	1.347	1.080	1.083	1.214	10.3
3,3'-Dichlorobenzidine	0.492	0.484	0.523	0.501	0.475	0.495	3.7
Benzo(a)Anthracene	* 1.402	1.376	1.472	1.275	1.267	1.358	6.4*
Chrysene	* 1.372	1.258	1.276	1.223	1.232	1.272	4.7*
Bis(2-Ethylhexyl)Phthalate	1.651	1.473	1.481	1.357	1.326	1.457	8.8
Di-N-Octylphthalate	2.866	3.023	2.741	2.420	2.283	2.667	11.6
Benzo(b)Fluoranthene	* 1.434	1.297	1.315	1.346	1.386	1.356	4.1*
Benzo(k)Fluoranthene	* 1.165	1.224	1.112	1.086	1.094	1.136	5.1*
Benzo(a)Pyrene	* 1.145	1.182	1.179	1.108	1.104	1.143	3.3*
Indeno(1,2,3-Cd)Pyrene	* 1.387	1.384	1.434	1.281	1.362	1.369	4.1*
Dibenz(A,H)Anthracene	* 1.068	1.056	1.044	1.006	1.070	1.049	2.5*
Benzo(G,H,I)Perylene	* 1.182	1.201	1.230	1.142	1.147	1.180	3.1*
Nitrobenzene-D5	0.505	0.533	0.491	0.457	0.419	0.481	9.3
2-Fluorobiphenyl	* 1.364	1.312	1.369	1.204	1.082	1.266	9.7*
Terphenyl-D14	* 1.046	1.024	1.031	0.884	0.904	0.978	7.9*
Phenol-D5	* 2.262	2.315	2.179	1.862	1.830	2.089	10.9*
2-Fluorophenol	* 1.635	1.652	1.685	1.458	1.393	1.565	8.3*
2,4,6-Tribromophenol	0.218	0.222	0.244	0.195	0.190	0.214	10.3

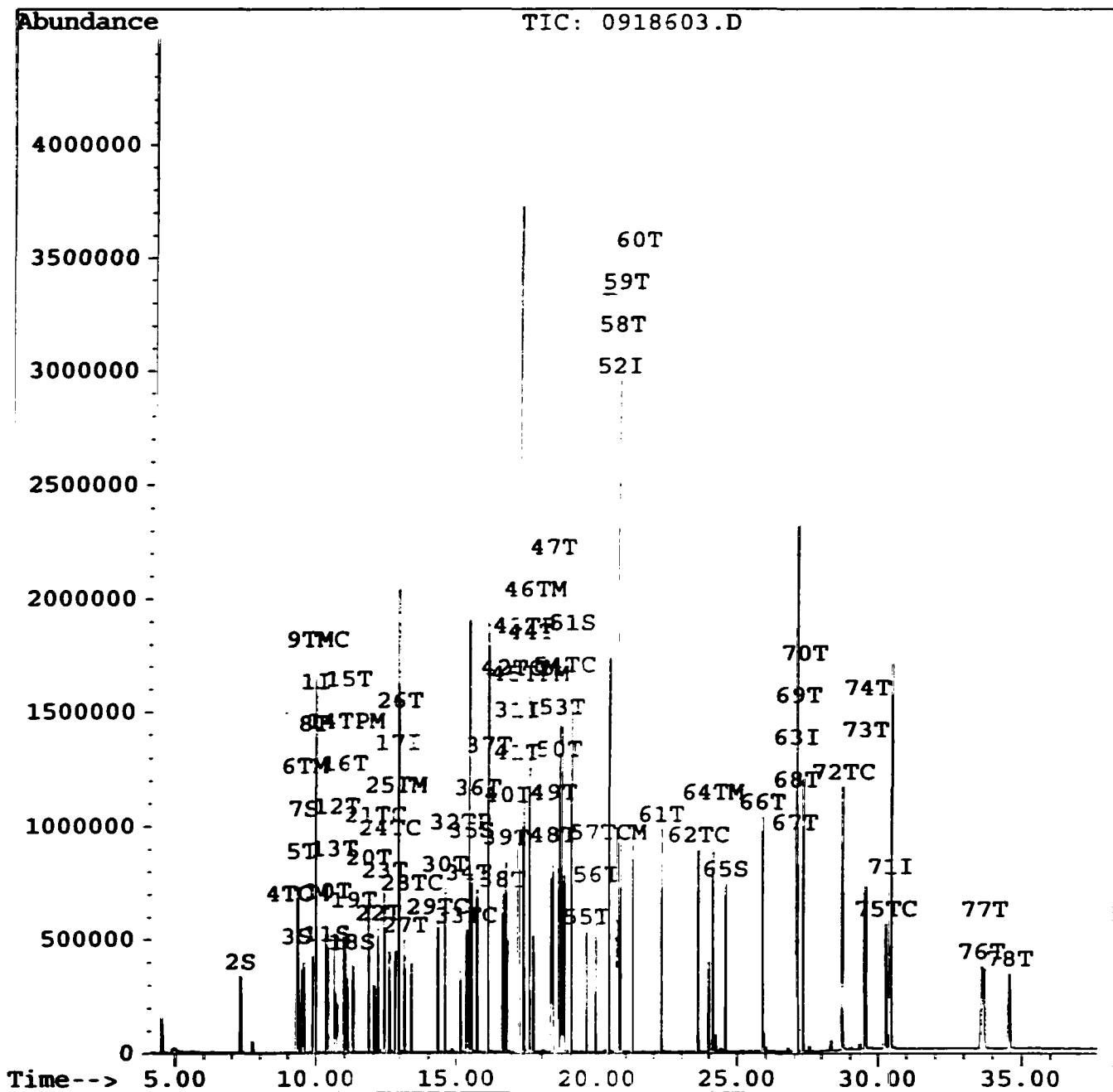
\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918603.D  
 Acq On : 18 Sep 97 12:03 pm  
 Sample : SSTD0106M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:01 1997

Vial: 4  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:02:41 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918603.D  
 Acq On : 18 Sep 97 12:03 pm  
 Sample : SSTD0106M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:01 1997

Vial: 4  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:02:41 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	491234	40.00		0.00
17) Naphthalene-d8	12.86	136	1988096	40.00		0.00
31) Acenaphthene-d10	17.11	164	1277723	40.00		0.00
52) Phenanthrene-d10	20.64	188	2453505	40.00		0.00
63) Chrysene-d12	27.06	240	1598397	40.00		0.00
71) Perylene-d12	30.43	264	1621883	40.00		0.00

## System Monitoring Compounds

System Monitoring Compounds				%Recovery
2) 2-Fluorophenol	7.29	112	200824	10.88
3) Phenol-d5	9.29	99	277799	10.76
7) 2-Chlorophenol-d4	9.52	132	181378	10.19
11) 1,2-Dichlorobenzene-d4	10.36	152	129939	11.08
18) Nitrobenzene-d5	11.25	82	251156	11.23
35) 2-Fluorobiphenyl	15.51	172	435746	11.21
51) 2,4,6-Tribromophenol	19.03	330	278851	38.73
65) Terphenyl-d14	24.56	244	417995	11.07

## Target Compounds

Target Compounds				Qvalue
4) Phenol	9.31	94	285914	11.18
5) Bis(2-Chloroethyl)ether	9.47	93	221198	11.07
6) 2-Chlorophenol	9.55	128	191466	10.67
8) 1,3-Dichlorobenzene	9.85	146	195385	10.59
9) 1,4-Dichlorobenzene	9.98	146	205918	10.80
10) 1,2-Dichlorobenzene	10.39	146	198090	11.05
12) 2,2'-oxybis(1-Chloropropan	10.68	45	269431	10.85
13) 2-Methylphenol	10.62	108	198455	11.02
14) N-Nitroso-di-n-propylamine	10.99	70	210642	12.79
15) Hexachloroethane	11.08	117	88587	11.21
16) 4-Methylphenol	10.96	108	218987	11.62
19) Nitrobenzene	11.29	77	246527	11.49
20) Isophorone	11.83	82	616634	12.67
21) 2-Nitrophenol	12.05	139	120734	9.98
22) 2,4-Dimethylphenol	12.18	107	217092	11.06
23) bis(2-Chloroethoxy)methane	12.40	93	325522	11.13
24) 2,4-Dichlorophenol	12.58	162	167286	9.84
25) 1,2,4-Trichlorobenzene	12.78	180	161488	10.36
26) Naphthalene	12.91	128	609070	12.15
27) 4-Chloroaniline	13.13	127	291222	11.23
28) Hexachlorobutadiene	13.37	225	77843	9.46
29) 4-Chloro-3-methylphenol	14.30	107	219491	11.68
30) 2-Methylnaphthalene	14.56	142	400286	11.43
32) Hexachlorocyclopentadiene	15.12	237	92391	8.51
33) 2,4,6-Trichlorophenol	15.32	196	135996	10.72
34) 2,4,5-Trichlorophenol	15.40	196	554888	42.99

(#) = qualifier out of range (m) = manual integration

0918603.D CLP691.M

Thu Sep 18 15:03:09 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918603.D  
 Acq On : 18 Sep 97 12:03 pm  
 Sample : SSTD0106M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:01 1997

Vial: 4  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:02:41 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.72	162	413074	11.33		99
37) 2-Nitroaniline	16.08	65	676256	51.19		98
38) Dimethylphthalate	16.61	163	547081	11.21		99
39) Acenaphthylene	16.72	152	697388	11.34		99
40) 2,6-Dinitrotoluene	16.77	165	112442	9.62		98
41) 3-Nitroaniline	17.09	138	612207	42.34	#	96
42) Acenaphthene	17.17	153	410761	11.15		99
43) 2,4-Dinitrophenol	17.33	184	276817	35.50		98
44) Dibenzofuran	17.56	168	576112	11.18		98
45) 4-Nitrophenol	17.53	109	329406	50.45		97
46) 2,4-Dinitrotoluene	17.70	165	173163	10.58		99
47) Diethylphthalate	18.34	149	628274	11.93		100
48) Fluorene	18.39	166	497007	12.07		100
49) 4-Chlorophenyl-phenylether	18.43	204	195181	11.54		98
50) 4-Nitroaniline	18.58	138	688819	43.12		94
53) 4,6-Dinitro-2-Methylphenol	18.67	198	402952	37.62		96
54) N-Nitrosodiphenylamine (1)	18.74	169	366268	11.20	#	85
55) 4-Bromophenyl-phenylether	19.59	248	107619	9.82		97
56) Hexachlorobenzene	19.91	284	134236	9.41		97
57) Pentachlorophenol	20.37	266	403645	37.38		99
58) Phenanthrene	20.69	178	684452	10.92		100
59) Anthracene	20.79	178	701072	11.07		99
60) Carbazole	21.22	167	741999	11.42		99
61) Di-n-butylphthalate	22.26	149	1080038	11.11		99
62) Fluoranthene	23.57	202	701776	10.51	#	92
64) Pyrene	24.10	202	710609	12.33	#	97
66) Butylbenzylphthalate	25.86	149	509308	12.11		98
67) Benzo(a)anthracene	27.01	228	560058	11.04		99
68) 3,3'-Dichlorobenzidine	27.04	252	196629	10.22	#	98
69) Chrysene	27.12	228	548357	11.49		99
70) bis(2-Ethylhexyl)phthalate	27.31	149	659728	12.85		99
72) Di-n-octylphthalate	28.70	149	1161932	12.44		99
73) Benzo(b)fluoranthene	29.48	252	581555	11.05		96
74) Benzo(k)fluoranthene	29.53	252	472190	10.47	#	90
75) Benzo(a)pyrene	30.25	252	464279	10.02		96
76) Indeno(1,2,3-cd)pyrene	33.61	275	562431	10.59		98
77) Dibenz(a,h)anthracene	33.69	278	433080	10.44	#	94
78) Benzo(g,h,i)perylene	34.57	276	479402	10.38		99

(#) = qualifier out of range (m) = manual integration  
 0918603.D CLP691.M Thu Sep 18 15:03:12 1997

MSD6

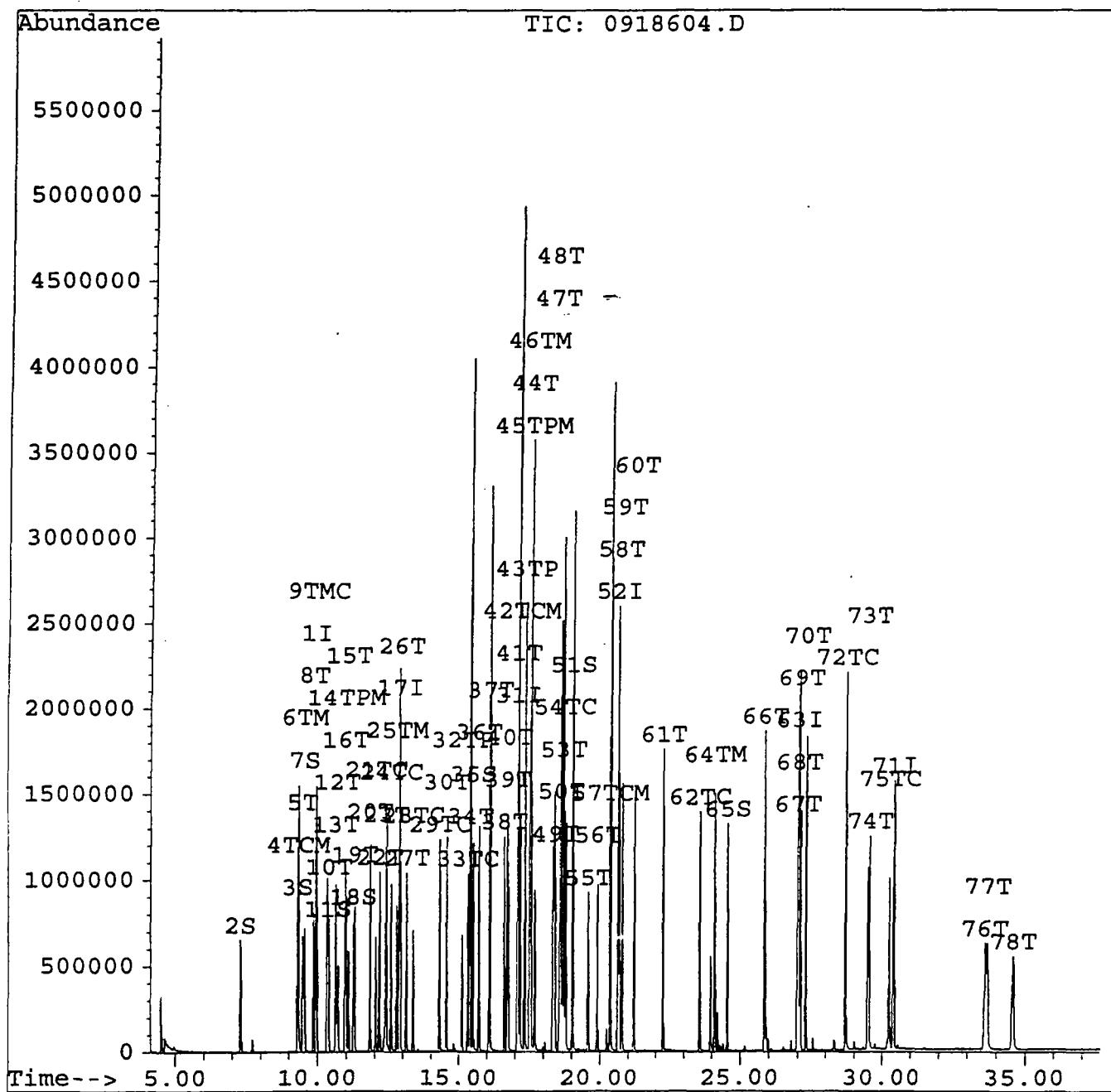
Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918604.D  
 Acq On : 18 Sep 97 12:50 pm  
 Sample : SSTD0206M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:04 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:05:26 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918604.D  
 Acq On : 18 Sep 97 12:50 pm  
 Sample : SSTD0206M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:04 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:05:26 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	469758	40.00		0.00
17) Naphthalene-d8	12.87	136	1969128	40.00		0.00
31) Acenaphthene-d10	17.10	164	1158080	40.00		0.00
52) Phenanthrene-d10	20.64	188	2164583	40.00		0.00
63) Chrysene-d12	27.06	240	1441962	40.00		-0.01
71) Perylene-d12	30.42	264	1489266	40.00		0.00
<b>System Monitoring Compounds</b>						<b>%Recovery</b>
2) 2-Fluorophenol	7.29	112	388003	21.99	54	76%
3) Phenol-d5	9.29	99	543639	22.03	55	65%
7) 2-Chlorophenol-d4	9.51	132	350876	20.61	51	53%
11) 1,2-Dichlorobenzene-d4	10.35	152	229910	20.50	51	255%
18) Nitrobenzene-d5	11.26	82	525241	23.71	59	287%
35) 2-Fluorobiphenyl	15.52	172	759697	21.57	53	920%
51) 2,4,6-Tribromophenol	19.04	330	641932	98.37	81	975%
65) Terphenyl-d14	24.56	244	738580	21.69	54	223%
<b>Target Compounds</b>						<b>Qvalue</b>
4) Phenol	9.32	94	540156	22.09	97	
5) Bis(2-Chloroethyl)ether	9.47	93	448467	23.47	98	
6) 2-Chlorophenol	9.55	128	345493	20.14	98	
8) 1,3-Dichlorobenzene	9.85	146	381591	21.63	99	
9) 1,4-Dichlorobenzene	9.98	146	385002	21.12	98	
10) 1,2-Dichlorobenzene	10.39	146	353581	20.63	99	
12) 2,2'-oxybis(1-Chloropropan	10.68	45	556589	23.43	74	65
13) 2-Methylphenol	10.63	108	384743	22.35	MM	78/74
14) N-Nitroso-di-n-propylamine	11.00	70	384988	24.44	100	
15) Hexachloroethane	11.07	117	169260	22.40	92	
16) 4-Methylphenol	10.96	108	442587	24.56	99	
19) Nitrobenzene	11.30	77	499016	23.49	100	
20) Isophorone	11.83	82	1178841	24.45	99	
21) 2-Nitrophenol	12.04	139	257440	21.49	98	
22) 2,4-Dimethylphenol	12.18	107	431541	22.19	99	
23) bis(2-Chloroethoxy)methane	12.41	93	688064	23.76	98	
24) 2,4-Dichloropheno	12.58	162	354269	21.05	98	
25) 1,2,4-Trichlorobenzene	12.78	180	318506	20.64	99	
26) Naphthalene	12.92	128	1004585	20.22	100	
27) 4-Chloroaniline	13.13	127	563267	21.92	98	
28) Hexachlorobutadiene	13.37	225	154399	18.94	99	
29) 4-Chloro-3-methylphenol	14.30	107	472880	25.40	98	
30) 2-Methylnaphthalene	14.56	142	724379	20.88	100	
32) Hexachlorocyclopentadiene	15.12	237	190940	19.41	100	
33) 2,4,6-Trichlorophenol	15.32	196	252675	21.97	98	
34) 2,4,5-Trichlorophenol	15.41	196	1193783	102.06	99	

(#) = qualifier out of range (m) = manual integration  
 0918604.D CLP691.M Thu Sep 18 15:05:41 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918604.D  
 Acq On : 18 Sep 97 12:50 pm  
 Sample : SSTD0206M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:04 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:05:26 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.71	162	779414	23.58		99
37) 2-Nitroaniline	16.10	65	1390643	116.14		98
38) Dimethylphthalate	16.62	163	997272	22.54		99
39) Acenaphthylenne	16.73	152	1272907	22.83		99
40) 2,6-Dinitrotoluene	16.78	165	231667	21.87		100
41) 3-Nitroaniline	17.11	138	1334113	101.79		98
42) Acenaphthene	17.18	153	675143	20.22		99
43) 2,4-Dinitrophenol	17.35	184	702481	99.40		99
44) Dibenzofuran	17.57	168	1011039	21.65	#	73
45) 4-Nitrophenol	17.56	109	799400	135.08		96
46) 2,4-Dinitrotoluene	17.70	165	340026	22.92		99
47) Diethylphthalate	18.35	149	1162238	24.36		100
48) Fluorene	18.39	166	833855	22.33		99
49) 4-Chlorophenyl-phenylether	18.42	204	333553	21.76		98
50) 4-Nitroaniline	18.64	138	1601650	110.62		97
53) 4,6-Dinitro-2-Methylphenol	18.70	198	956805	101.25		97
54) N-Nitrosodiphenylamine (1)	18.75	169	658838	22.84	#	84
55) 4-Bromophenyl-phenylether	19.60	248	188632	19.51		96
56) Hexachlorobenzene	19.92	284	242180	19.24		96
57) Pentachlorophenol	20.38	266	907316	95.24		99
58) Phenanthrene	20.70	178	1188986	21.50		100
59) Anthracene	20.80	178	1210321	21.66		100
60) Carbazole	21.22	167	1296304	22.61		100
61) Di-n-butylphthalate	22.26	149	1940703	22.62		99
62) Fluoranthene	23.57	202	1200604	20.38		96
64) Pyrene	24.10	202	1293755	24.88		96
66) Butylbenzylphthalate	25.86	149	928263	24.46		97
67) Benzo(a)anthracene	27.01	228	991923	21.68		100
68) 3,3'-Dichlorobenzidine	27.04	252	348660	20.08		99
69) Chrysene	27.12	228	907225	21.07		99
70) bis(2-Ethylhexyl)phthalate	27.31	149	1061747	22.92		99
72) Di-n-octylphthalate	28.70	149	2251324	26.25		99
73) Benzo(b)fluoranthene	29.49	252	966050	19.98		99
74) Benzo(k)fluoranthene	29.54	252	911466	22.00		97
75) Benzo(a)pyrene	30.25	252	880402	20.69		98
76) Indeno(1,2,3-cd)pyrene	33.62	276	1030227	21.12		96
77) Dibenz(a,h)anthracene	33.70	278	786683	20.65		98
78) Benzo(g,h,i)perylene	34.60	276	894136	21.09		99

(#) = qualifier out of range (m) = manual integration  
 0918604.D CLP691.M Thu Sep 18 15:05:44 1997

MSD6

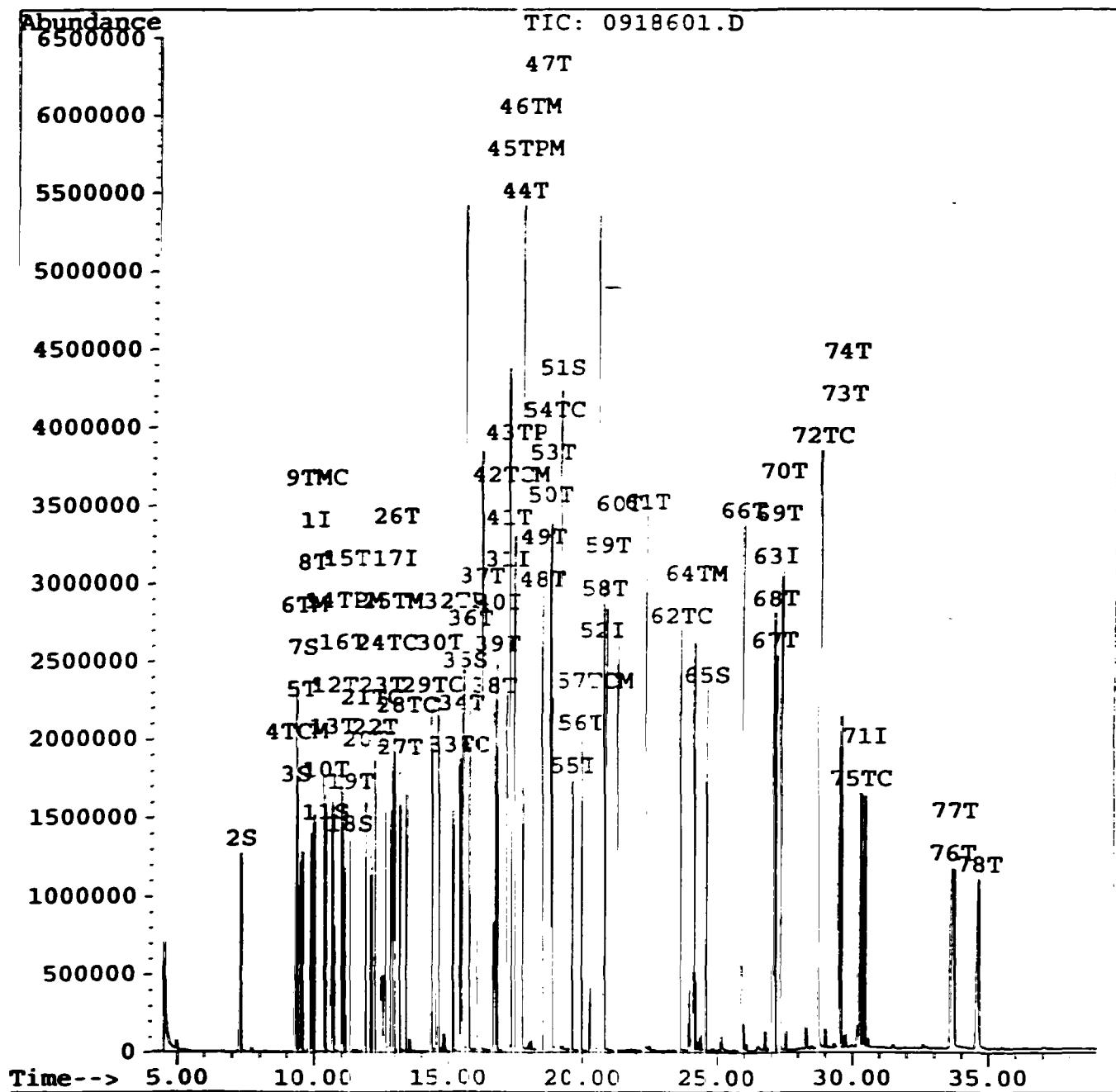
Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709185.B\0918601.D  
 Acq On : 18 Sep 97 10:24 am  
 Sample : SSTD0406M SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 12:34 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 12:35:49 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918601.D  
 Acq On : 18 Sep 97 10:24 am  
 Sample : SSTD0406M SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 12:34 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 12:35:49 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	446080	40.00		0.00
17) Naphthalene-d8	12.87	136	1848849	40.00		0.00
31) Acenaphthene-d10	17.10	164	1017544	40.00		0.00
52) Phenanthrene-d10	20.64	188	2144515	40.00		0.00
63) Chrysene-d12	27.07	240	1380851	40.00		0.00
71) Perylene-d12	30.43	264	1567023	40.00		0.00

## System Monitoring Compounds

System Monitoring Compounds	R.T.	QIon	Response	%Recovery
2) 2-Fluorophenol	7.28	112	751730	45.57
3) Phenol-d5	9.30	99	971830	41.20
7) 2-Chlorophenol-d4	9.51	132	628189	37.83
11) 1,2-Dichlorobenzene-d4	10.36	152	419773	38.38
18) Nitrobenzene-d5	11.26	82	907361	44.07
35) 2-Fluorobiphenyl	15.51	172	1393450	45.26
51) 2,4,6-Tribromophenol	19.05	330	993985	175.01
65) Terphenyl-d14	24.57	244	1423719	45.22

## Target Compounds

Target Compounds	R.T.	QIon	Response	QValue
4) Phenol	9.33	94	832920	33.68
5) Bis(2-Chloroethyl)ether	9.47	93	760019	41.73
6) 2-Chlorophenol	9.54	128	634275	37.88
8) 1,3-Dichlorobenzene	9.86	146	729098	43.72
9) 1,4-Dichlorobenzene	9.98	146	700697	39.51
10) 1,2-Dichlorobenzene	10.39	146	643584	38.71
12) 2,2'-oxybis(1-Chloropropan	10.68	45	828150	35.78
13) 2-Methylphenol	10.63	108	673170	41.41
14) N-Nitroso-di-n-propylamine	11.01	70	653004	45.21
15) Hexachloroethane	11.07	117	306534	44.11
16) 4-Methylphenol	10.97	108	719912	41.86
19) Nitrobenzene	11.30	77	856505	42.39
20) Isophorone	11.84	82	2027151	45.99
21) 2-Nitrophenol	12.05	139	495212	43.36
22) 2,4-Dimethylphenol	12.18	107	843609	48.02
23) bis(2-Chloroethoxy)methane	12.41	93	1413704	54.72
24) 2,4-Dichlorophenol	12.59	162	750148	48.14
25) 1,2,4-Trichlorobenzene	12.78	180	677715	46.34
26) Naphthalene	12.91	128	1897690	39.42
27) 4-Chloroaniline	13.13	127	993997	39.20
28) Hexachlorobutadiene	13.36	225	337261	43.92
29) 4-Chloro-3-methylphenol	14.30	107	901303	54.61
30) 2-Methylnaphthalene	14.56	142	1354996	40.09
32) Hexachlorocyclopentadiene	15.11	237	443019	52.93
33) 2,4,6-Trichlorophenol	15.32	196	535128	55.55
34) 2,4,5-Trichlorophenol	15.41	196	1772640	175.32

(#) = qualifier out of range (m) = manual integration

0918601.D CLP691.M Thu Sep 18 12:36:05 1997 MSD6 Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918601.D  
 Acq On : 18 Sep 97 10:24 am  
 Sample : SSTD0406M SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 12:34 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 12:35:49 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.72	162	1300089	44.60		95
37) 2-Nitroaniline	16.11	65	1900722	188.80		86
38) Dimethylphthalate	16.62	163	1968038	53.36		99
39) Acenaphthylene	16.73	152	2302168	46.75		99
40) 2,6-Dinitrotoluene	16.78	165	407510	43.24	#	85
41) 3-Nitroaniline	17.13	138	1826534	155.17	#	95
42) Acenaphthene	17.18	153	1258548	42.86		100
43) 2,4-Dinitrophenol	17.36	184	961620	146.68	#	76
44) Dibenzofuran	17.57	168	1875691	47.52		
45) 4-Nitrophenol	17.57	109	1155097	270.44	#	
46) 2,4-Dinitrotoluene	17.71	165	621846	49.70	#	80
47) Diethylphthalate	18.36	149	2161085	55.48		99
48) Fluorene	18.39	166	1576930	50.43		99
49) 4-Chlorophenyl-phenylether	18.42	204	592762	44.90	#	89
50) 4-Nitroaniline	18.67	138	2233199	178.08	#	84
53) 4,6-Dinitro-2-Methylphenol	18.73	198	1342137	133.86	#	85
54) N-Nitrosodiphenylamine (1)	18.77	169	1231931	43.07		99
55) 4-Bromophenyl-phenylether	19.59	248	382802	38.63	#	88
56) Hexachlorobenzene	19.93	284	513114	39.97	#	92
57) Pentachlorophenol	20.38	266	1416168	145.99		99
58) Phenanthrene	20.70	178	2342668	42.60		99
59) Anthracene	20.80	178	2232196	39.04		100
60) Carbazole	21.23	167	2336361	40.22		99
61) Di-n-butylphthalate	22.26	149	3756735	44.10		99
62) Fluoranthene	23.58	202	2376125	40.08		98
64) Pyrene	24.12	202	2457333	53.79		
66) Butylbenzylphthalate	25.86	149	1860334	56.95		91
67) Benzo(a)anthracene	27.02	228	2032392	49.16		99
68) 3,3'-Dichlorobenzidine	27.05	252	721537	44.43		99
69) Chrysene	27.13	228	1761601	43.64		99
70) bis(2-Ethylhexyl)phthalate	27.32	149	2044965	48.63		99
72) Di-n-octylphthalate	28.71	149	4295122	52.14		99
73) Benzo(b)fluoranthene	29.50	252	2060229	41.18		99
74) Benzo(k)fluoranthene	29.55	252	1742171	41.20	m	98
75) Benzo(a)pyrene	30.27	252	1846998	41.78		98
76) Indeno(1,2,3-cd)pyrene	33.66	276	2247202	44.87	m	45
77) Dibenz(a,h)anthracene	33.73	278	1636318	40.76		99
78) Benzo(g,h,i)perylene	34.63	276	1926790	43.90		93

(#) = qualifier out of range (m) = manual integration  
 0918601.D CLP691.M Thu Sep 18 12:36:08 1997

MSD6

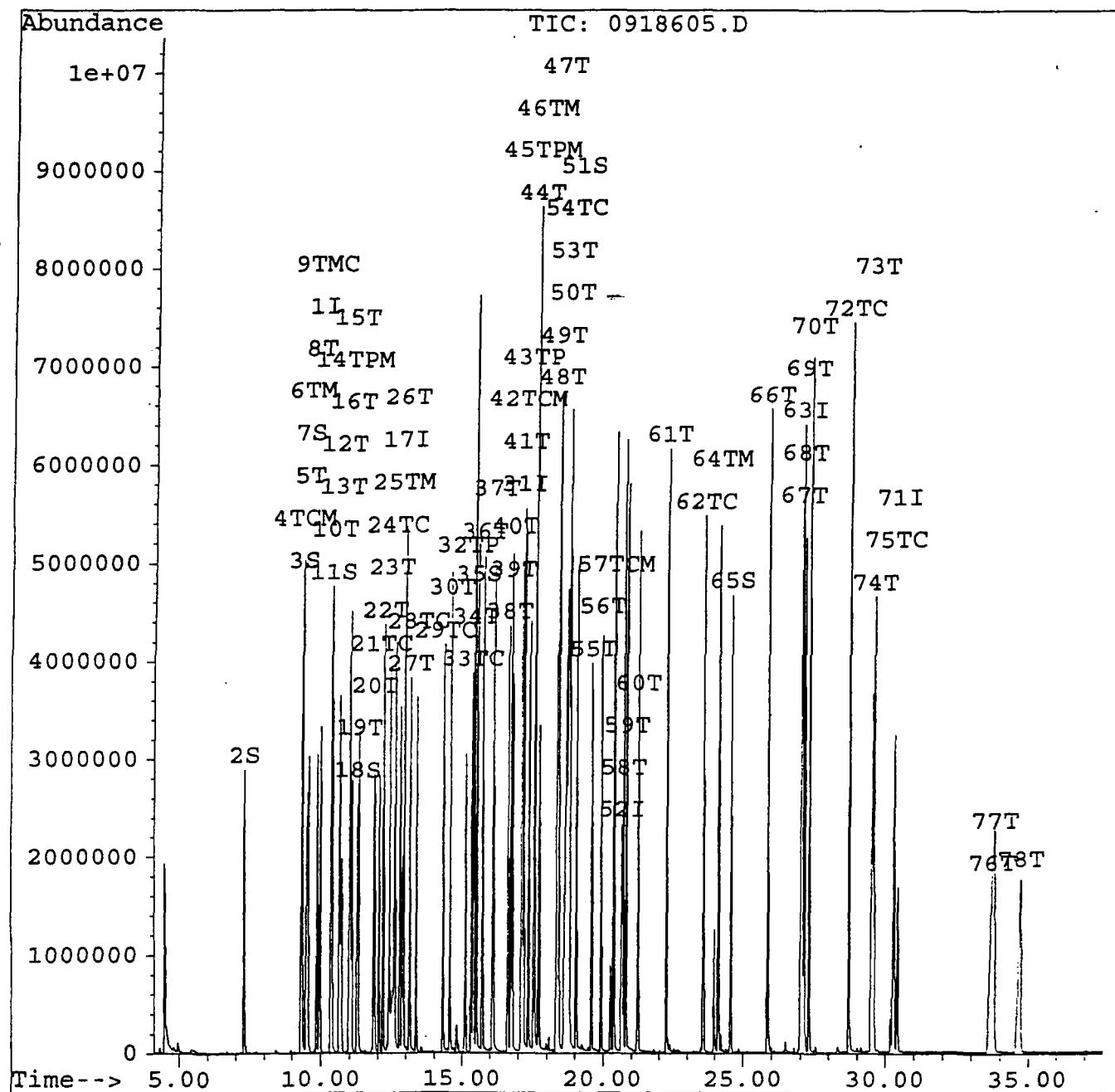
Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918605.D  
 Acq On : 18 Sep 97 1:36 pm  
 Sample : SSTD1006M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:06 1997

Vial: 6  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplir: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:07:17 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918605.D  
 Acq On : 18 Sep 97 1:36 pm  
 Sample : SSTD1006M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:06 1997

Vial: 6  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:07:17 1997  
 Response via : Initial Calibration.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	448173	40.00		0.00
17) Naphthalene-d8	12.88	136	1921965	40.00		0.00
31) Acenaphthene-d10	17.11	164	1157458	40.00		0.00
52) Phenanthrene-d10	20.66	188	2222541	40.00		0.02
63) Chrysene-d12	27.08	240	1418341	40.00		0.01
71) Perylene-d12	30.43	264	1452206	40.00		0.00

System Monitoring Compounds	%Recovery
2) 2-Fluorophenol	242.641%
3) Phenol-d5	221.83%
7) 2-Chlorophenol-d4	226.003%
11) 1,2-Dichlorobenzene-d4	230.697%
18) Nitrobenzene-d5	253.670%
35) 2-Fluorobiphenyl	247.436%
51) 2,4,6-Tribromophenol	144.373%
65) Terphenyl-d14	233.922%

Target Compounds	Qvalue
4) Phenol	99
5) Bis(2-Chloroethyl)ether	100
6) 2-Chlorophenol	96
8) 1,3-Dichlorobenzene	99
9) 1,4-Dichlorobenzene	98
10) 1,2-Dichlorobenzene	97
12) 2,2'-oxybis(1-Chloropropan	# 69
13) 2-Methylphenol	97
14) N-Nitroso-di-n-propylamine	90
15) Hexachloroethane	98
16) 4-Methylphenol	98
19) Nitrobenzene	99
20) Isophorone	100
21) 2-Nitrophenol	94
22) 2,4-Dimethylphenol	97
23) bis(2-Chloroethoxy)methane	98
24) 2,4-Dichlorophenol	98
25) 1,2,4-Trichlorobenzene	99
26) Naphthalene	99
27) 4-Chloroaniline	99
28) Hexachlorobutadiene	99
29) 4-Chloro-3-methylphenol	98
30) 2-Methylnaphthalene	99
32) Hexachlorocyclopentadiene	100
33) 2,4,6-Trichlorophenol	99
34) 2,4,5-Trichlorophenol	99

(#) = qualifier out of range (m) = manual integration  
 0918605.D CLP691.M Thu Sep 18 15:07:32 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918605.D  
 Acq On : 18 Sep 97 1:36 pm  
 Sample : SSTD1006M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:06 1997

Vial: 6  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 15:07:17 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.73	162	3156114	95.53		98
37) 2-Nitroaniline	16.12	65	2628842	219.67		97
38) Dimethylphthalate	16.64	163	4203340	95.04		100
39) Acenaphthylene	16.74	152	5024699	90.18		100
40) 2,6-Dinitrotoluene	16.81	165	1122684	106.03		99
41) 3-Nitroaniline	17.15	138	2491114	190.17		97
42) Acenaphthene	17.20	153	3130872	93.81		98
43) 2,4-Dinitrophenol	17.38	184	1506151	213.23		97
44) Dibenzofuran	17.59	168	4449408	95.32	#	61
45) 4-Nitrophenol	17.59	109	1493514	252.51	#	82
46) 2,4-Dinitrotoluene	17.75	165	1551226	104.63		99
47) Diethylphthalate	18.37	149	4524737	94.87		100
48) Fluorene	18.42	166	3663981	98.19		100
49) 4-Chlorophenyl-phenylether	18.44	204	1555590	101.55		99
50) 4-Nitroaniline	18.70	138	3015487	208.38		100
53) 4,6-Dinitro-2-Methylphenol	18.75	198	1896466	195.45	#	49
54) N-Nitrosodiphenylamine (1)	18.79	169	2828355	95.51		95
55) 4-Bromophenyl-phenylether	19.60	248	875221	88.15		97
56) Hexachlorobenzene	19.94	284	1197863	92.69		98
57) Pentachlorophenol	20.40	266	1693316	173.12		99
58) Phenanthrene	20.72	178	5379992	94.76		99
59) Anthracene	20.83	178	5223547	91.05		98
60) Carbazole	21.25	167	5403917	91.80		99
61) Di-n-butylphthalate	22.28	149	7713694	87.56		99
62) Fluoranthene	23.60	202	5217820	86.26		99
64) Pyrene	24.14	202	5300175	103.62		99
66) Butylbenzylphthalate	25.89	149	3827812	102.56		100
67) Benzo(a)anthracene	27.04	228	4521892	100.47		99
68) 3,3'-Dichlorobenzidine	27.07	252	1776144	104.00		97
69) Chrysene	27.16	228	4336469	102.38		99
70) bis(2-Ethylhexyl)phthalate	27.33	149	4810029	105.57		98
72) Di-n-octylphthalate	28.72	149	8784446	105.04		100
73) Benzo(b)fluoranthene	29.53	252	4886991	103.67	m	98
74) Benzo(k)fluoranthene	29.60	252	3943703	97.63	m	97
75) Benzo(a)pyrene	30.31	252	4021090	96.90	m	98
76) Indeno(1,2,3-cd)pyrene	33.71	276	4648895	97.72		91
77) Dibenz(a,h)anthracene	33.80	278	3652606	98.34		97
78) Benzo(g,h,i)perylene	34.72	276	4145174	100.28		95

(#) = qualifier out of range (m) = manual integration

0918605.D CLP691.M Thu Sep 18 15:07:35 1997

MSD6

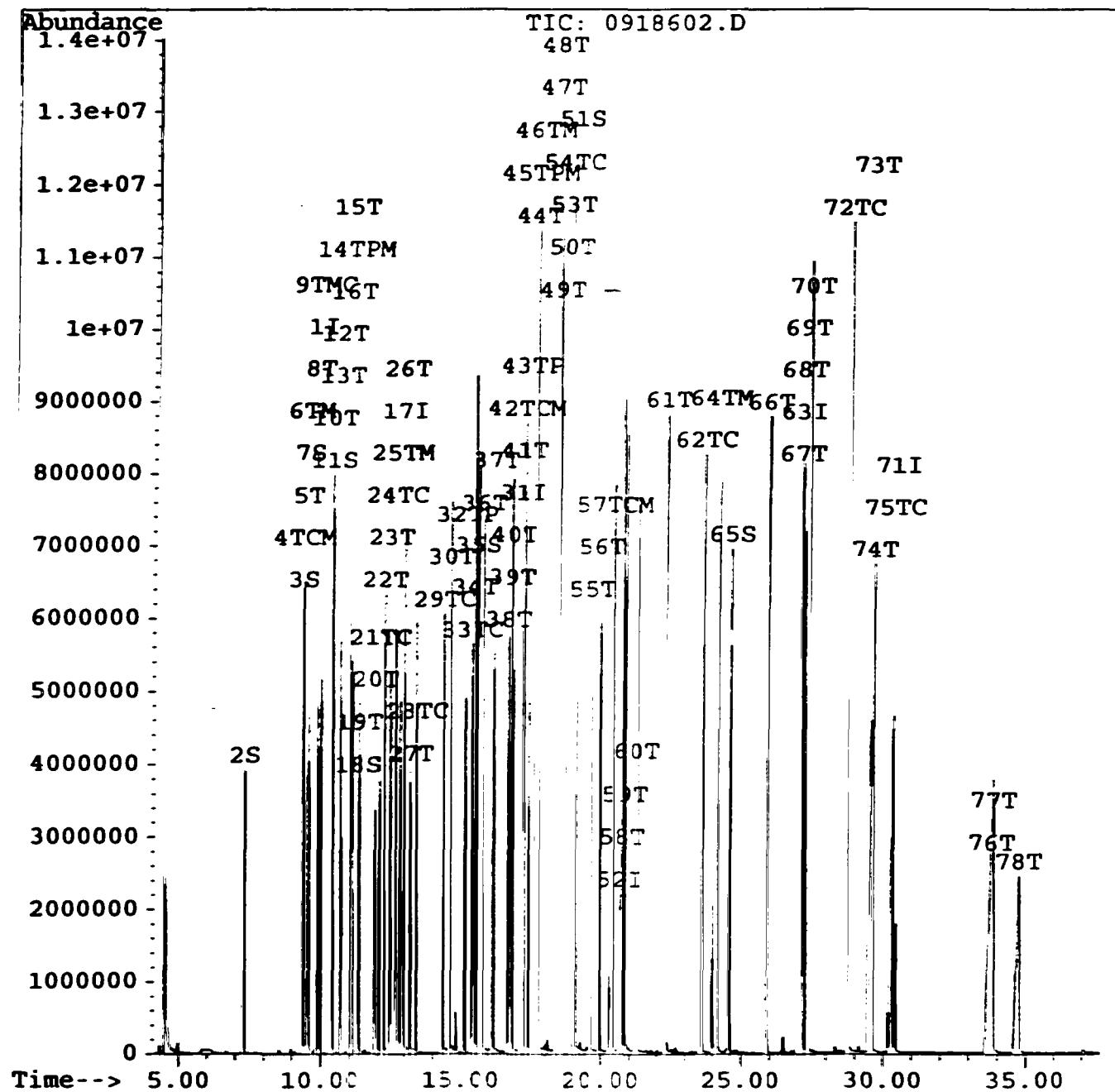
Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918602.D  
 Acq On : 18 Sep 97 11:17 am  
 Sample : SSTD1606M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 13:29 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 13:30:21 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918602.D  
 Acq On : 18 Sep 97 11:17 am  
 Sample : SSTD1606M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 13:29 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 13:30:21 1.97  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.95	152	452987	40.00		0.02
17) Naphthalene-d8	12.89	136	2088409	40.00		0.01
31) Acenaphthene-d10	17.12	164	1261536	40.00		0.02
52) Phenanthrene-d10	20.67	188	2347589	40.00		0.03
63) Chrysene-d12	27.09	240	1417943	40.00		0.02
71) Perylene-d12	30.45	264	1484030	40.00		0.02

System Monitoring Compounds	%Recovery
2) 2-Fluorophenol	368.132%
3) Phenol-d5	344.089%
7) 2-Chlorophenol-d4	355.331%
11) 1,2-Dichlorobenzene-d4	347.952%
18) Nitrobenzene-d5	370.909%
35) 2-Fluorobiphenyl	350.739%
51) 2,4,6-Tribromophenol	166.172%
65) Terphenyl-d14	383.581%

Target Compounds	Qvalue
4) Phenol	96
5) Bis(2-Chloroethyl)ether	98
6) 2-Chlorophenol	98
8) 1,3-Dichlorobenzene	98
9) 1,4-Dichlorobenzene	99
10) 1,2-Dichlorobenzene	97
12) 2,2'-oxybis(1-Chloropropan	49
13) 2-Methylphenol	# M8M
14) N-Nitroso-di-n-propylamine	98
15) Hexachloroethane	100
16) 4-Methylphenol	98
19) Nitrobenzene	99
20) Isophorone	100
21) 2-Nitrophenol	94
22) 2,4-Dimethylphenol	99
23) bis(2-Chloroethoxy)methane	98
24) 2,4-Dichlorophenol	99
25) 1,2,4-Trichlorobenzene	99
26) Naphthalene	98
27) 4-Chloroaniline	99
28) Hexachlorobutadiene	100
29) 4-Chloro-3-methylphenol	99
30) 2-Methylnaphthalene	98
32) Hexachlorocyclopentadiene	100
33) 2,4,6-Trichlorophenol	99
34) 2,4,5-Trichlorophenol	98

(#) = qualifier out of range (m) = manual integration

0918602.D CLP691.M Thu Sep 18 13:30:46 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918602.D  
 Acq On : 18 Sep 97 11:17 am  
 Sample : SSTD1606M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 13:29 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\CLP691.M  
 Title :  
 Last Update : Thu Sep 18 13:30:21 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.75	162	5096033	138.82		98
37) 2-Nitroaniline	16.14	65	3130309	242.71		99
38) Dimethylphthalate	16.66	163	6766970	139.40		99
39) Acenaphthylene	16.75	152	7890346	127.01		98
40) 2,6-Dinitrotoluene	16.83	165	1671818	142.42		98
41) 3-Nitroaniline	17.17	138	3108710	214.64		99
42) Acenaphthene	17.22	153	5102987	138.49		98
43) 2,4-Dinitrophenol	17.40	184	1733674	221.01		98
44) Dibenzofuran	17.60	168	7354521	146.68	#	~
45) 4-Nitrophenol	17.62	109	1783253	297.81	#	~
46) 2,4-Dinitrotoluene	17.77	165	2541965	158.56		99
47) Diethylphthalate	18.39	149	7415209	143.32		97
48) Fluorene	18.43	166	6073381	151.86		99
49) 4-Chlorophenyl-phenylether	18.45	204	2491141	152.50		97
50) 4-Nitroaniline	18.74	138	3671767	233.83		98
53) 4,6-Dinitro-2-Methylphenol	18.79	198	2196880	209.62	#	49
54) N-Nitrosodiphenylamine (1)	18.82	169	4392659	140.41		93
55) 4-Bromophenyl-phenylether	19.61	248	1462506	136.28		100
56) Hexachlorobenzene	19.96	284	1831644	131.27		99
57) Pentachlorophenol	20.40	266	2197934	209.35		100
58) Phenanthrene	20.74	178	8362815	137.96		98
59) Anthracene	20.85	178	8148552	131.76		99
60) Carbazole	21.27	167	8723260	138.32		98
61) Di-n-butylphthalate	22.29	149	11666753	122.89		98
62) Fluoranthene	23.62	202	8927252	138.36		99
64) Pyrene	24.15	202	8428549	167.66		~
66) Butylbenzylphthalate	25.90	149	6142810	167.41		99
67) Benzo(a)anthracene	27.06	228	7185852	163.19		98
68) 3,3'-Dichlorobenzidine	27.10	252	2696910	160.19	#	96
69) Chrysene	27.19	228	6989754	165.92		98
70) bis(2-Ethylhexyl)phthalate	27.34	149	7518193	167.46		98
72) Di-n-octylphthalate	28.74	149	13552352	165.29		99
73) Benzo(b)fluoranthene	29.55	252	8229945	172.80	DL	98
74) Benzo(k)fluoranthene	29.63	252	6496295	163.67	M	97
75) Benzo(a)pyrene	30.34	252	6552409	155.14	M	97
76) Indeno(1,2,3-cd)pyrene	33.78	276	8084438	166.07		92
77) Dibenz(a,h)anthracene	33.87	278	6349004	166.55		96
78) Benzo(g,h,i)perylene	34.78	276	6811286	160.32		93

(#) = qualifier out of range (m) = manual integration  
 0918602.D CLP691.M Thu Sep 18 13:30:48 1997

MSD6

Page 2

6B

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

**Case No.: 1364-226**

SDG No.: 08367

Instrument ID: MSD6

Calibration Date(s): 09/18/97 09/18/97  
Calibration Times: 10:24 13:36

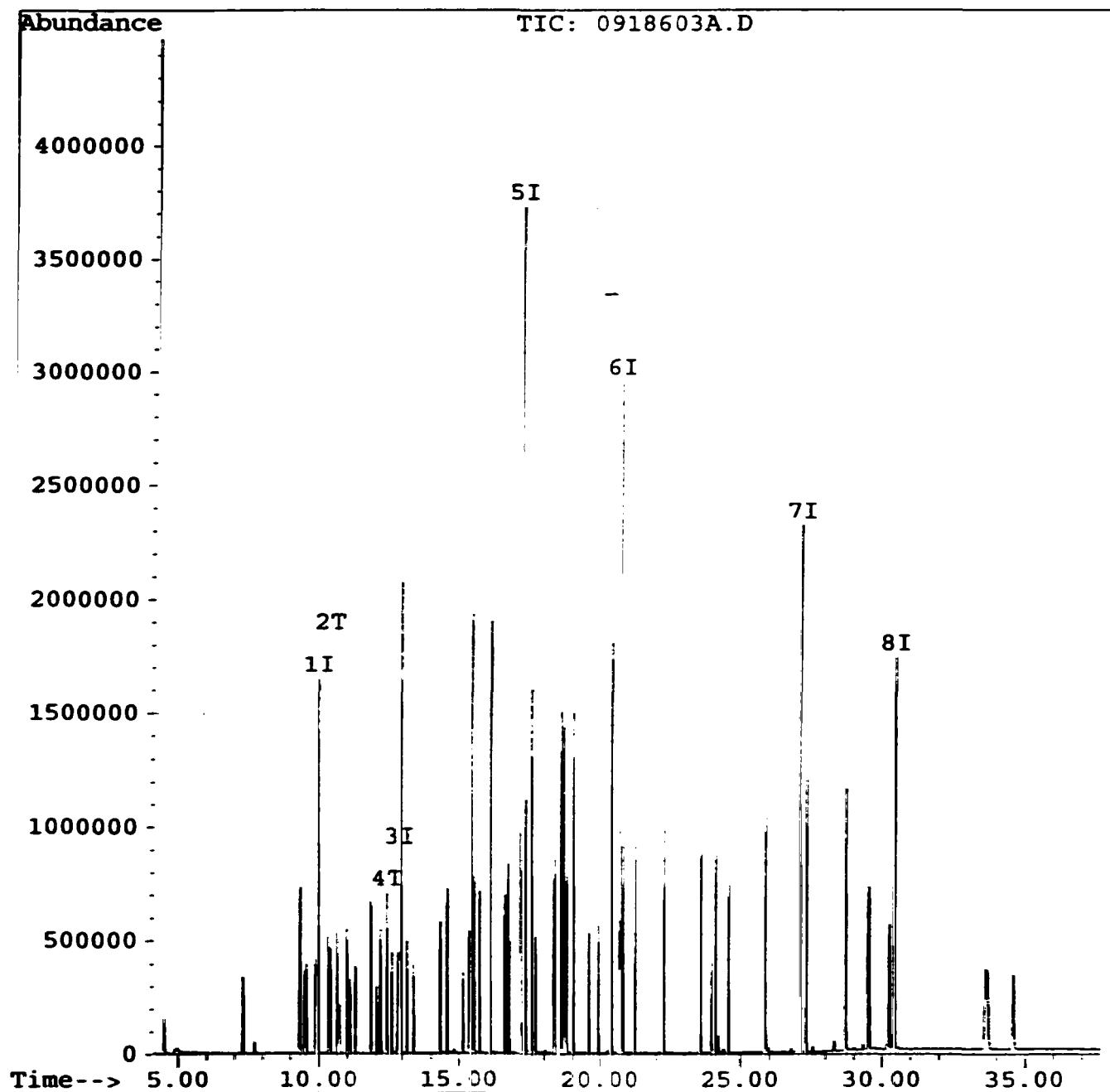
\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918603a.d  
Acq On : 18 Sep 97 12:03 pm  
Sample : SSTD0106M SVCLP621-A  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 18 15:14 1997

Vial: 4  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
Title :  
Last Update : Thu Sep 18 15:13:25 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918603a.d  
 Acq On : 18 Sep 97 12:03 pm  
 Sample : SSTD0106M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:14 1997

Vial: 4  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:13:25 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	491234	40.00		0.00
3) Naphthalene-d8	12.86	136	1988096	40.00		0.00
5) Acenaphthene-d10	17.11	164	1277723	40.00		0.00
6) Phenanthrene-d10	20.64	188	2453505	40.00		0.00
7) Chrysene-d12	27.06	240	1598397	40.00		0.00
8) Perylene-d12	30.43	264	1621883	40.00		0.00

## System Monitoring Compounds %Recovery

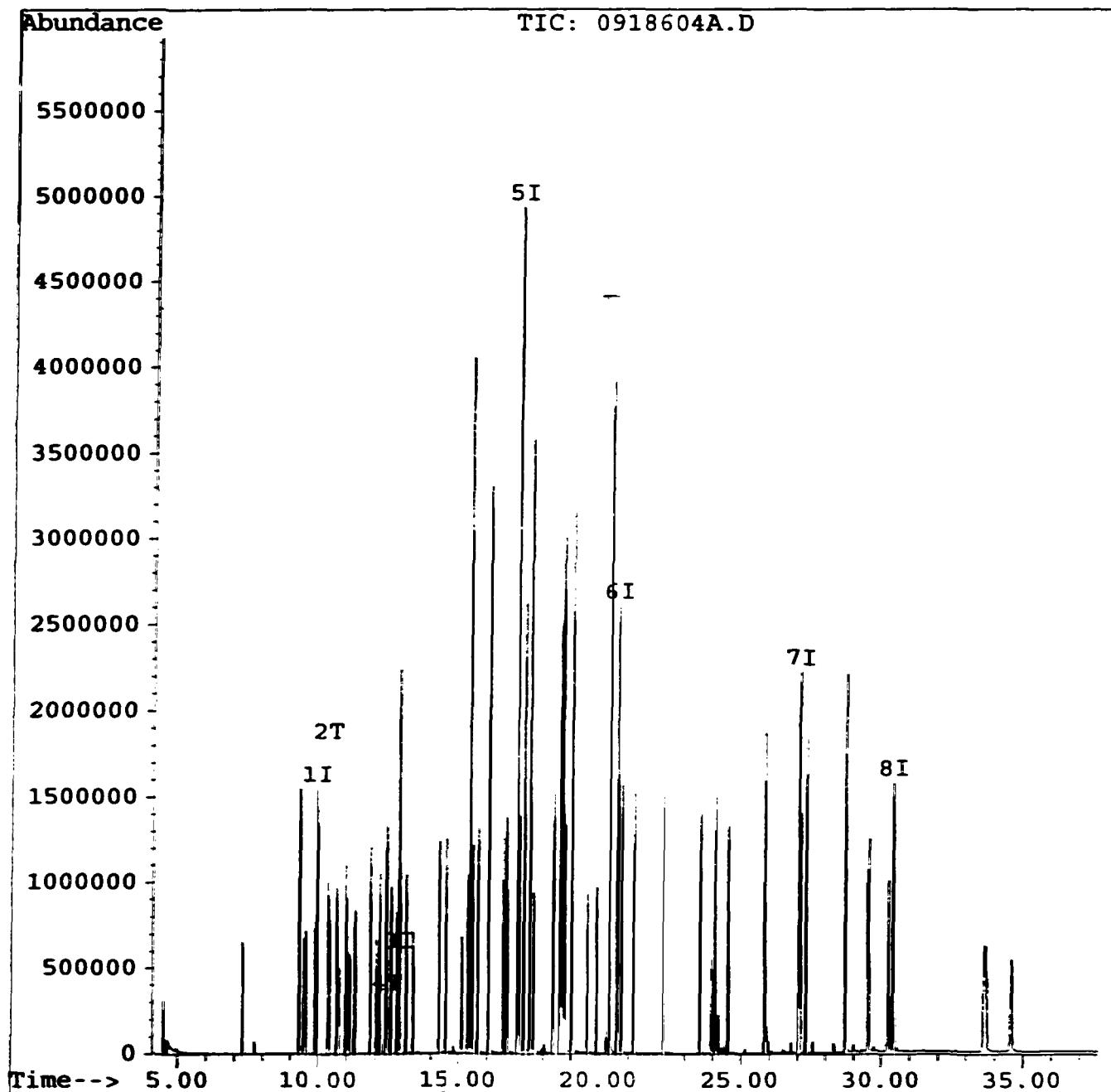
Target Compounds					Qvalue
2) Benzyl Alcohol	10.32	108	154125	11.19	# 87
4) Benzoic acid	12.39	122	128069	9.45	96

## Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918604a.d  
Acq On : 18 Sep 97 12:50 pm  
Sample : SSTD0206M SVCLP621-A  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 18 15:14 1997

Vial: 5  
Operator: VAN LAKE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
Title :  
Last Update : Thu Sep 18 15:13:25 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918604a.d  
 Acq On : 18 Sep 97 12:50 pm  
 Sample : SSTD0206M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:14 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:13:25 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	469758	40.00		0.00
3) Naphthalene-d8	12.87	136	1969128	40.00		0.00
5) Acenaphthene-d10	17.10	164	1158080	40.00		0.00
6) Phenanthrene-d10	20.64	188	2164583	40.00		0.00
7) Chrysene-d12	27.06	240	1441962	40.00		-0.01
8) Perylene-d12	30.42	264	1489266	40.00		0.00

## System Monitoring Compounds

%Recovery

## Target Compounds

Qvalue

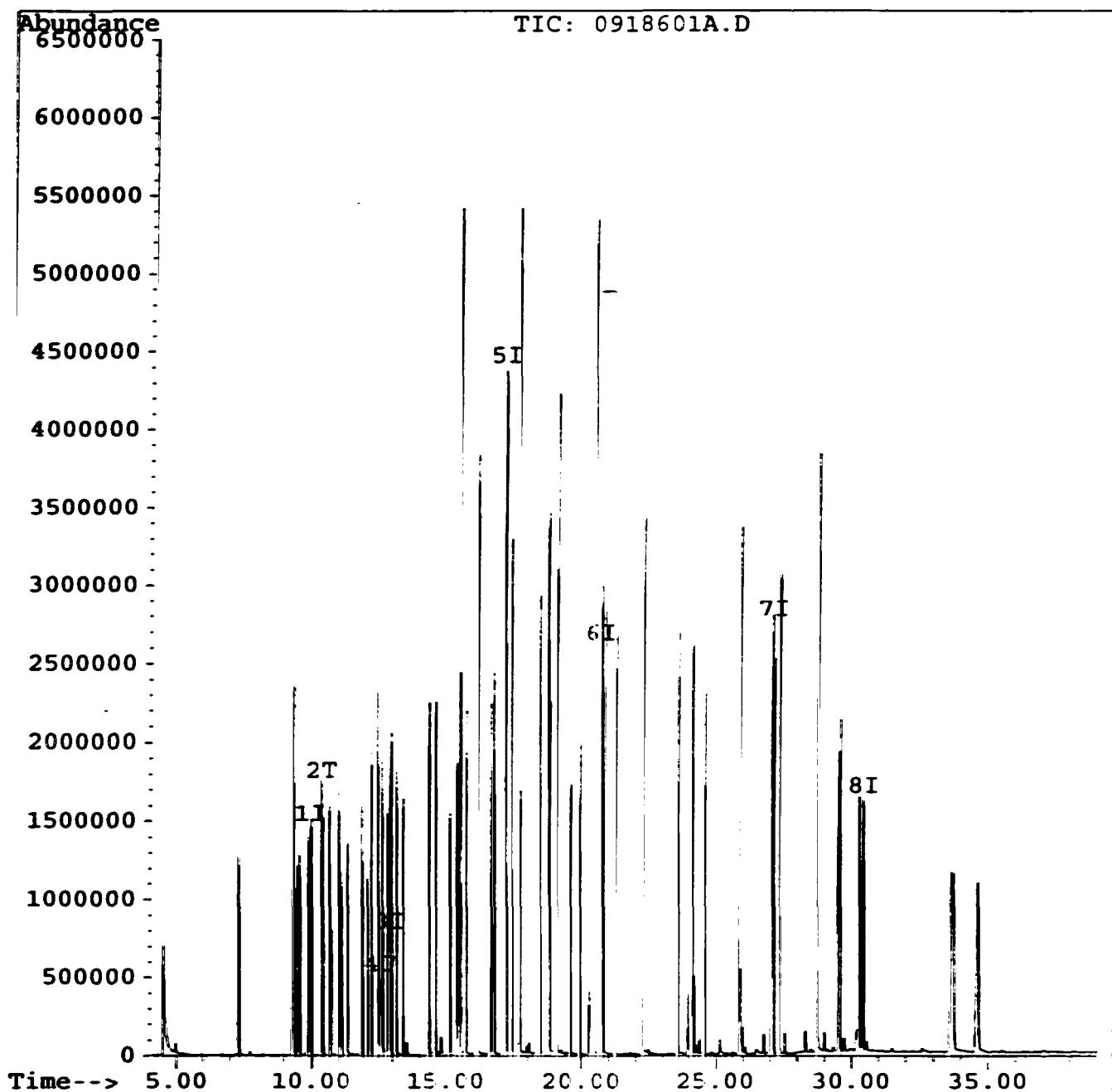
2) Benzyl Alcohol	10.33	108	307848	23.37	#	90
4) Benzoic acid	12.45	122	287850	21.43		90

Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918601a.d  
Acq On : 18 Sep 97 10:24 am  
Sample : SSTD0406M SVCLP621-D  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 18 15:13 1997

Vial: 2  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
Title :  
Last Update : Thu Sep 18 15:13:25 1997  
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\9709186.b\0918601a.d  
 Acq On : 18 Sep 97 10:24 am  
 Sample : SSTD0406M SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:13 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:13:25 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	446080	40.00		0.00
3) Naphthalene-d8	12.87	136	1848849	40.00		0.00
5) Acenaphthene-d10	17.10	164	1017544	40.00		0.00
6) Phenanthrene-d10	20.64	188	2144515	40.00		0.00
7) Chrysene-d12	27.07	240	1380851	40.00		0.00
8) Perylene-d12	30.43	264	1567023	40.00		0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

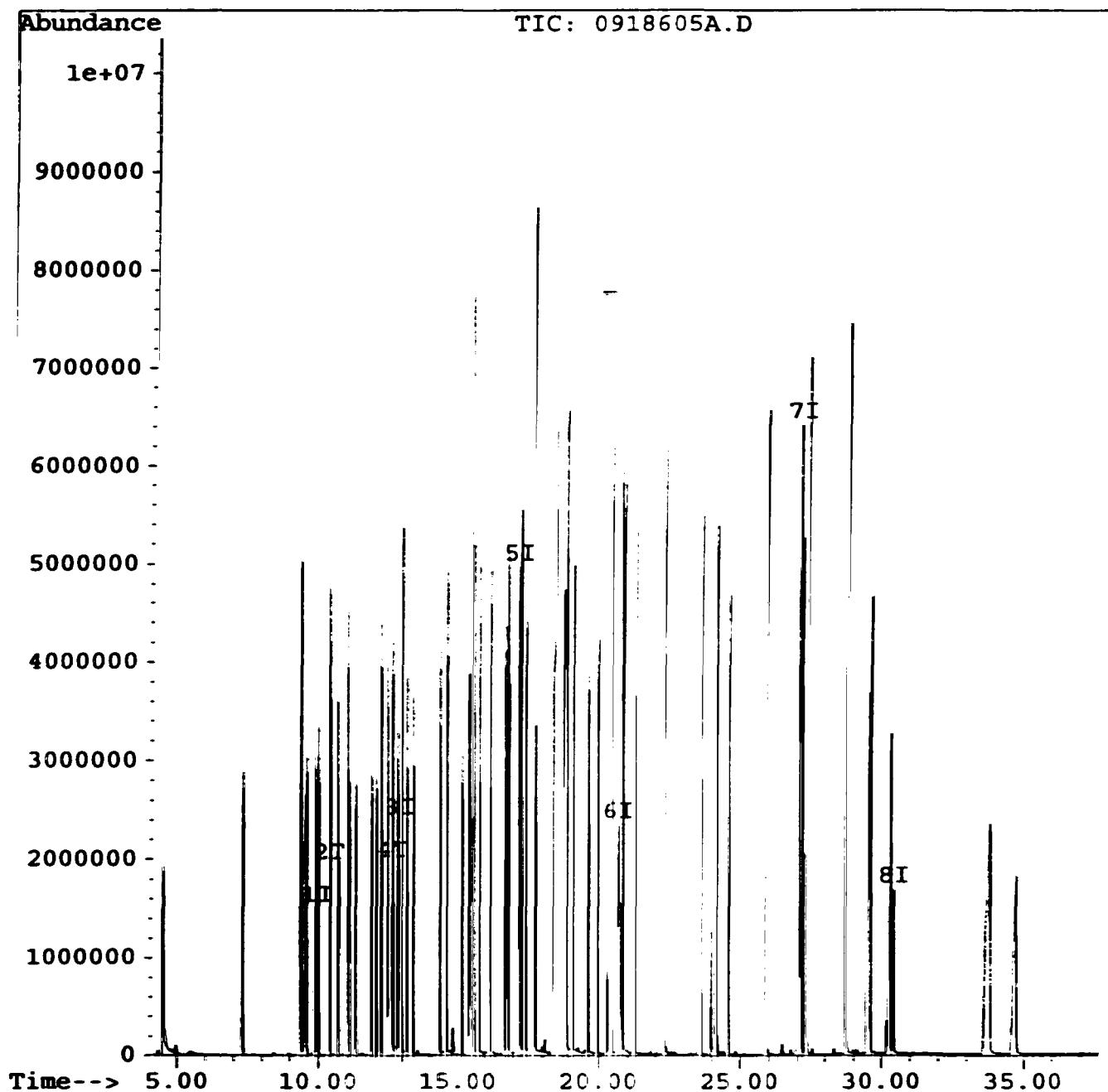
2) Benzyl Alcohol	10.33	108	533465	42.65	#	91
4) Benzoic acid	12.50	122	586696	46.53		90

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918605A.D  
Acq On : 18 Sep 97 1:36 pm  
Sample : SSTD1006M SVCLP621-A  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 18 15:19 1997

Vial: 6  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
Title :  
Last Update : Thu Sep 18 15:19:24 1997  
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918605A.D  
 Acq On : 18 Sep 97 1:36 pm  
 Sample : SSTD1006M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:19 1997

Vial: 6  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:19:24 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)-
1) 1,4-dichlorobenzene-d4	9.94	152	448173	40.00		0.00
3) Naphthalene-d8	12.88	136	1921965	40.00		0.00
5) Acenaphthene-d10	17.11	164	1157458	40.00		0.00
6) Phenanthrene-d10	20.66	188	2222541	40.00		0.02
7) Chrysene-d12	27.08	240	1418341	40.00		0.01
8) Perylene-d12	30.43	264	1452206	40.00		0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Benzyl Alcohol	10.34	108	1245876	99.14	#	90
4) Benzoic acid	12.63	122	1584096	120.85	m	93

DY  
M/8/97

(#) = qualifier out of range (m) = manual integration  
 0918605A.D MIDCO.M Thu Sep 18 15:19:33 1997 MSD6 Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918602A.D  
 Acq On : 18 Sep 97 11:17 am  
 Sample : SSTD1606M SVCLP621-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 18 15:16 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:16:57 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.95	152	452987	40.00		0.02
3) Naphthalene-d8	12.89	136	2088409	40.00		0.01
5) Acenaphthene-d10	17.12	164	1261536	40.00		0.02
6) Phenanthrene-d10	20.67	188	2347589	40.00		0.03
7) Chrysene-d12	27.09	240	1417943	40.00		0.02
8) Perylene-d12	30.45	264	1484030	40.00		0.02

## System Monitoring Compounds

## Target Compounds

2) Benzyl Alcohol	10.37	108	1848847	145.55	#	89
4) Benzoic acid	12.74	122	2553274	179.26	m	92

%Recovery

Qvalue

**6B**  
**SW-846 SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA**

Lab Name: IEA-NC

Method: 8270

Lab Code: IEA

**Case No.: 1364-226**

SDG No.: 08367

Instrument ID: MSD6

Calibration Date(s): 09/18/97 09/18/97  
Calibration Times: 14:22 17:26

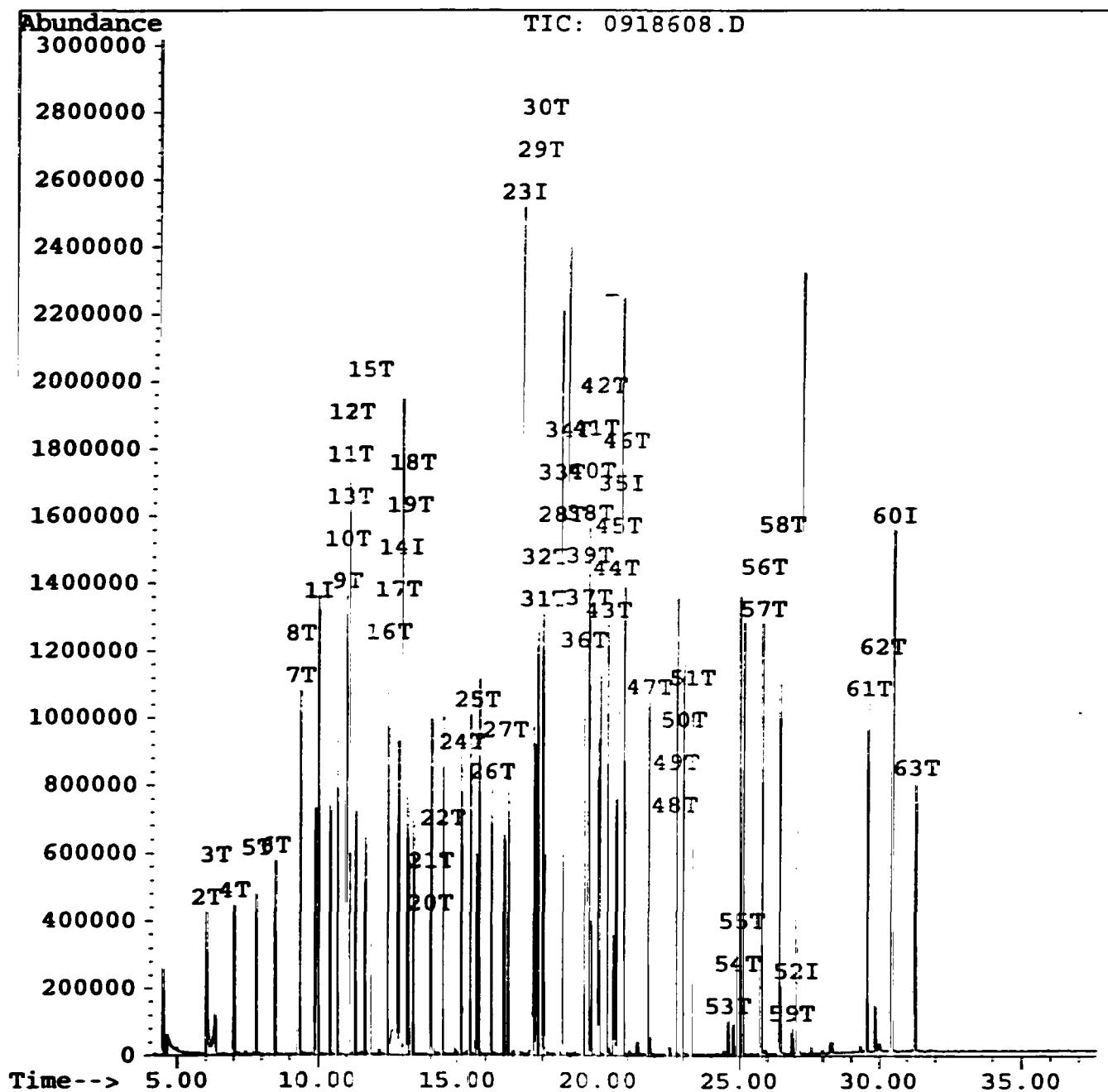
\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918608.D  
 Acq On : 18 Sep 97 3:54 pm  
 Sample : SSTD0206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:52 1997

Vial: 9  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 10:54:36 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918608.D  
 Acq On : 18 Sep 97 3:54 pm  
 Sample : SSTD0206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:52 1997

Vial: 9  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 10:54:36 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-d4	9.95	152	420414	40.00		0.00
14) Naphthalene-d8	12.87	136	1676251	40.00		0.00
23) Acenaphthene-d10	17.11	164	1176405	40.00		0.00
35) Phenanthrene-d10	20.65	188	1881137	40.00		0.00
52) Chrysene-d12	27.06	240	1368029	40.00		0.00
60) Perylene-d12	30.42	264	1405790	40.00		0.00

## System Monitoring Compounds %Recovery

Target Compounds					Qvalue
2) 2-Picoline	6.02	93	386209	22.79	99
3) N-Nitrosomethylmethylethylamine	6.34	88	198850	22.59	94
4) Methyl methanesulfonate	7.00	80	307666	26.24	97
5) N-Nitrosodiethylamine	7.78	102	197492	22.93	98
6) Ethyl methanesulfonate	8.46	79	421447	24.53	99
7) Pentachloroethane	9.31	167	124690	23.03	97
8) Aniline	9.33	93	678015	25.92	100
9) Acetophenone	10.93	105	553828	24.79	99
10) N-Nitrosopyrrolidine	10.93	100	254833	25.32	96
11) N-Nitrosomorpholine	10.98	56	274999	28.72	98
12) o-Toluidine	11.03	106	591718	27.67	94
13) 3-Methylphenol	10.98	108	787197	52.19	94
15) N-Nitrosopiperidine	11.66	114	257523	26.44	97
16) O,O,O-Triethylphosphorothioate	12.44	198	143349	22.70	98
17) a,a-Dimethylphenethylamine	12.76	58	1366491	24.15	m 94/95
18) Hexachloropropene	13.21	213	159927	20.01	99
19) 2,6-Dichlorophenol	13.15	162	319848	22.60	98
20) 1,4-Phenylenediamine	13.96	108	393844	30.36	m 98
21) N-Nitrosodi-n-butylamine	14.00	84	316881	26.44	97
22) Safrole	14.41	162	262164	22.45	97
24) 1,2,4,5-Tetrachlorobenzene	15.07	216	278681	18.82	99
25) Isosafrole	15.64	162	178683	21.62	97
26) 1,4-Naphthoquinone	16.18	158	285271	41.83	99
27) 1,3-Dinitrobenzene	16.65	168	165903	19.04	99
28) Thionazin	18.53	248	17333	17.37	93
29) Pentachlorobenzene	17.63	250	268117	19.35	100
30) 1-Naphthylamine	17.78	143	851666	23.65	99
31) 2-Naphthylamine	17.96	143	884582	26.79	99
32) 2,3,4,6-Tetrachlorophenol	17.99	232	185815	19.81	99
33) 5-Nitro-o-toluidine	18.53	152	297588	24.55	98
34) Diphenylamine	18.75	169	1212547	22.97	100
36) Sulfotep	19.40	322	78084	17.71	88
37) 1,3,5-Trinitrobenzene	19.53	213	72528	19.45	84
38) Phorate	19.56	260	37100	18.14	84

(#) = qualifier out of range (m) = manual integration

0918608.D IEAAPDX2.M Fri Sep 19 10:54:51 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918608.D  
 Acq On : 18 Sep 97 3:54 pm  
 Sample : SSTD0206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:52 1997

Vial: 9  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 10:54:36 1997  
 Response via : Initial Calibration

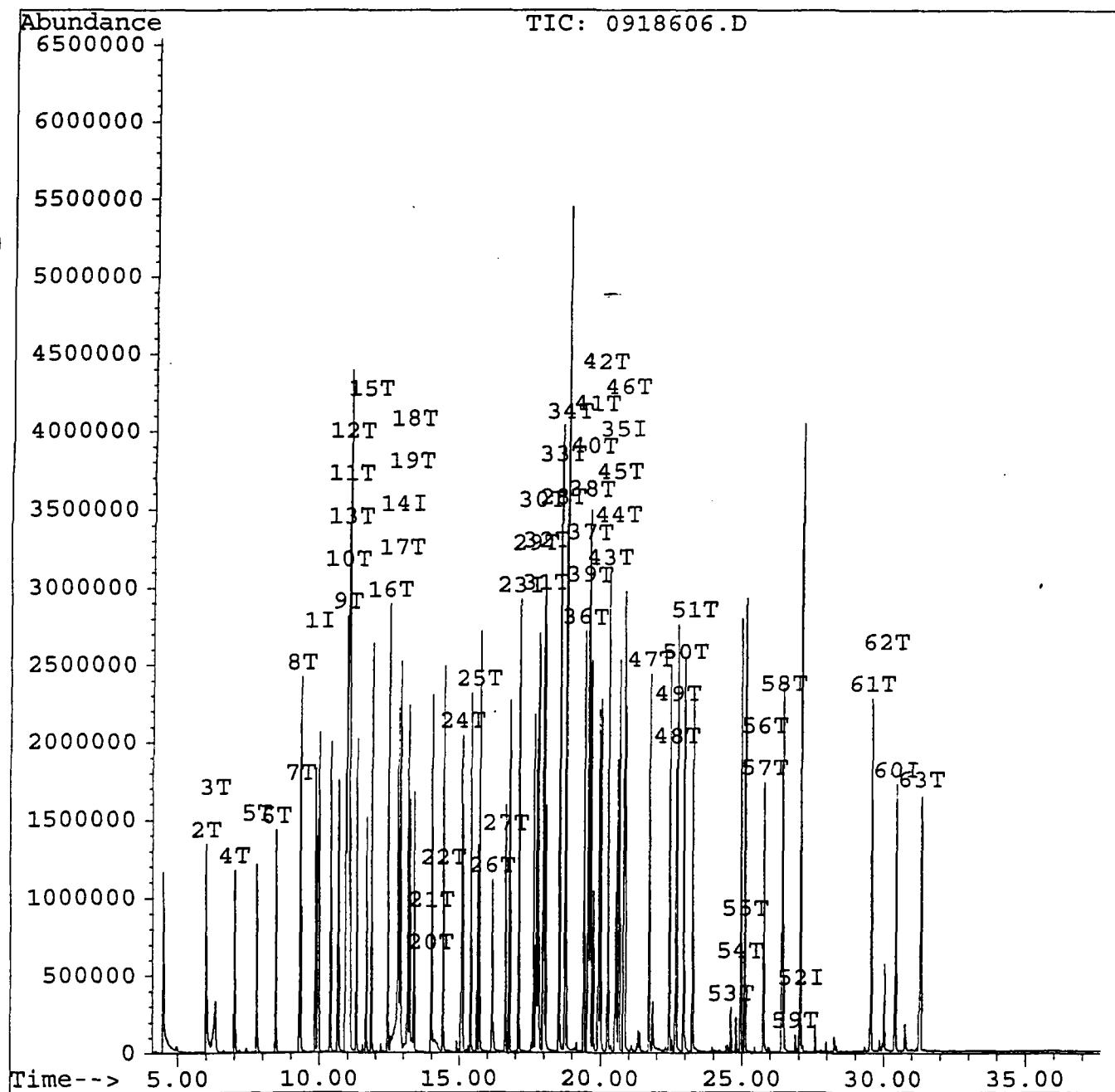
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Diallate (isomer 1)	19.54	86	391481	25.32		95
40) Phenacetin	19.61	108	597800	26.26		100
41) Diallate (isomer 2)	19.73	86	160021	26.56		98
42) Dimethoate	19.99	229	13462	22.60		88
43) 4-Aminobiphenyl	20.25	169	915635	24.66		99
44) Pronamide	20.51	173	126465	24.39		98
45) Pentachloronitrobenzene	20.56	237	91658	24.43		97
46) Disulfoton	20.83	274	12980	14.91		55
47) Methylparathion	21.73	263	124607	21.54		
48) 4-Nitroquinoline-1-oxide	22.66	190	137898	23.58		
49) Parathion	22.70	291	76737	20.82		97
50) Methapyriline	22.95	97	538924	35.82		99
51) Isodrin	23.26	193	134925	23.74		97
53) Aramite	24.61	185	13978	25.32	#	93
54) p-Dimethylaminoazobenzene	24.95	225	223887	22.38		98
55) Chlorobenzilate	25.10	251	295420	21.96		97
56) 3,3'-Dimethylbenzidine	25.76	212	530449	30.70		99
57) Kepone	25.76	272	25565	27.61	#	94
58) 2-Acetylaminofluorene	26.40	181	525401	23.71		98
59) Famphur	26.88	218	26705	47.74	#	96
61) 7,12-Dimethylbenz[a]anthra	29.54	256	420587	21.58	#	100
62) Hexachlorophene	30.02	196	6955	8.96	#	53
63) 3-Methylcholanthrene	31.28	268	472727	21.08		96

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918606.D  
Acq On : 18 Sep 97 2:22 pm  
Sample : SSTD0506N SVCLP619-D  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 19 9:10 1997

Vial: 7  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
Title :  
Last Update : Fri Sep 19 09:11:55 1997  
Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918606.D  
 Acq On : 18 Sep 97 2:22 pm  
 Sample : SSTD0506N SVCLP619-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 9:10 1997

Vial: 7  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 09:11:55 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	467865	40.00		0.00
14) Naphthalene-d8	12.88	136	1866578	40.00		0.00
23) Acenaphthene-d10	17.11	164	1302945	40.00		0.00
35) Phenanthrene-d10	20.66	188	2148384	40.00		0.00
52) Chrysene-d12	27.07	240	1441132	40.00		0.00
60) Perylene-d12	30.42	264	1522166	40.00		0.00

## System Monitoring Compounds

%Recovery

Target Compounds					Value
2) 2-Picoline	6.00	93	1054349	56.29	94
3) N-Nitrosomethylmethylethylamine	6.34	88	566681	59.12	99
4) Methyl methanesulfonate	7.01	80	816578	66.21	94
5) N-Nitrosodiethylamine	7.79	102	514870	53.48	95
6) Ethyl methanesulfonate	8.47	79	1093663	58.70	99
7) Pentachloroethane	9.30	167	310809	51.23	91
8) Aniline	9.33	93	1609504	55.57	94
9) Acetophenone	10.93	105	1455250	59.99	97
10) N-Nitrosopyrrolidine	10.95	100	650985	58.51	96
11) N-Nitrosomorpholine	10.99	56	660468	63.94	92
12) o-Toluidine	11.04	106	1427718	61.23	93
13) 3-Methylphenol	10.99	108	1885425	112.03	# 94
15) N-Nitrosopiperidine	11.67	114	611922	57.19	95
16) O,O,O-Triethylphosphorothioate	12.44	198	363293	51.39	82
17) a,a-Dimethylphenethylamine	12.85	58	3359609	53.48	m 99
18) Hexachloropropene	13.22	213	467460	52.31	#
19) 2,6-Dichlorophenol	13.15	162	860127	54.67	# 90
20) 1,4-Phenylenediamine	13.95	108	468299	29.29	m 85
21) N-Nitrosodi-n-butylamine	13.99	84	805866	62.39	94
22) Safrole	14.42	162	680493	52.14	# 77
24) 1,2,4,5-Tetrachlorobenzene	15.07	216	723188	42.91	97
25) Isosafrole	15.64	162	427523	46.12	# 85
26) 1,4-Naphthoquinone	16.17	158	492595	72.30	# 82
27) 1,3-Dinitrobenzene	16.64	168	406790	41.21	# 72
28) Thionazin	18.54	248	36756	30.19	# 1
29) Pentachlorobenzene	17.64	250	688218	43.13	# 93
30) 1-Naphthylamine	17.78	143	2024069	50.52	m 92
31) 2-Naphthylamine	17.97	143	2136604	60.32	92
32) 2,3,4,6-Tetrachlorophenol	18.00	232	489962	45.46	# 92
33) 5-Nitro-o-toluidine	18.55	152	677552	50.16	# 83
34) Diphenylamine	18.76	169	2976111	50.42	99
36) Sulfoteppe	19.42	322	211247	39.23	# 41
37) 1,3,5-Trinitrobenzene	19.54	213	183135	41.88	# 13
38) Phorate	19.57	260	92888	37.08	# 1

(#) = qualifier out of range (m) = manual integration  
 0918606.D IEAAPDX2.M Fri Sep 19 09:12:12 1997

MSD6

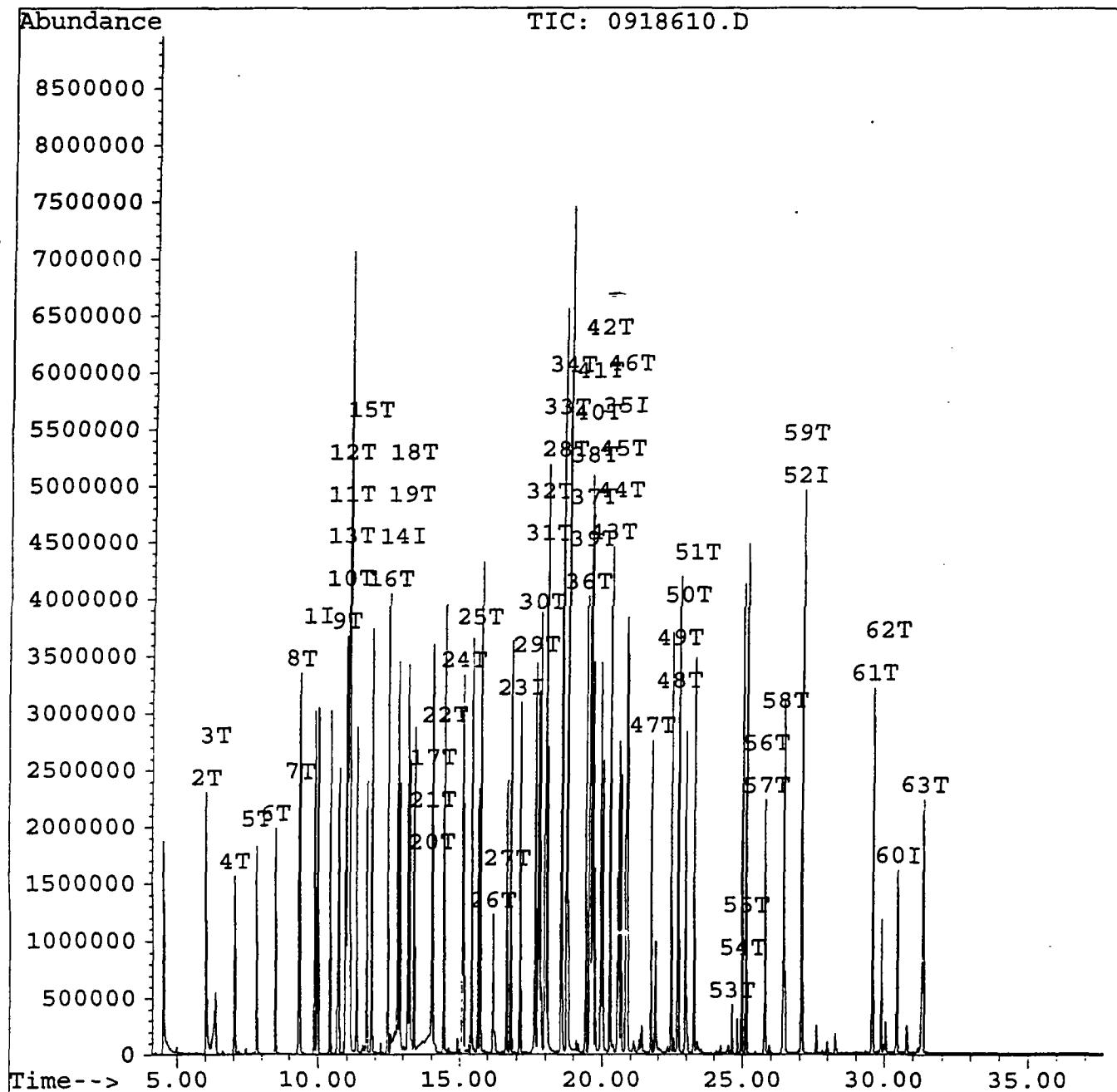
Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918610.D  
Acq On : 18 Sep 97 5:26 pm  
Sample : SSTD0806N SVCLP619-A  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 19 11:06 1997

Vial: 11  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
Title :  
Last Update : Fri Sep 19 11:07:31 1997  
Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918610.D  
 Acq On : 18 Sep 97 5:26 pm  
 Sample : SSTD0806N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 11:06 1997

Vial: 11  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:07:31 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-d4	9.95	152	477708	40.00		0.01
14) Naphthalene-d8	12.88	136	1956926	40.00		0.00
23) Acenaphthene-d10	17.11	164	1360031	40.00		0.00
35) Phenanthrene-d10	20.66	188	2156683	40.00		0.00
52) Chrysene-d12	27.07	240	1406862	40.00		0.00
60) Perylene-d12	30.44	264	1492175	40.00		0.02

## System Monitoring Compounds

\*Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qual
2) 2-Picoline	6.00	93	1673642	86.93		100
3) N-Nitrosomethylmethylethylamine	6.35	88	905020	90.49		98
4) Methyl methanesulfonate	7.02	80	1299817	97.56		98
5) N-Nitrosodiethylamine	7.80	102	804215	82.16		99
6) Ethyl methanesulfonate	8.48	79	1707261	87.46		99
7) Pentachloroethane	9.31	167	544954	88.57		98
8) Aniline	9.34	93	2419674	81.40		98
9) Acetophenone	10.94	105	2292076	90.29		100
10) N-Nitrosopyrrolidine	10.99	100	975791	85.32		87
11) N-Nitrosomorpholine	11.02	56	973551	89.48		99
12) o-Toluidine	11.06	106	1952853	80.36	#DL	1
13) 3-Methylphenol	11.02	108	2746142	160.24	m	83
15) N-Nitrosopiperidine	11.69	114	1028629	90.46		99
16) O,O,O-Triethylphosphorothioate	12.46	198	568644	77.12		99
17) a,a-Dimethylphenethylamine	14.03	58	5759077	87.18	m	1
18) Hexachloropropene	13.22	213	754410	80.84		1
19) 2,6-Dichlorophenol	13.15	162	1331329	80.58		98
20) 1,4-Phenylenediamine	13.98	108	506147	33.42	m	92
21) N-Nitrosodi-n-butylamine	14.01	84	1223465	87.44		96
22) Safrole	14.42	162	1056272	77.49		97
24) 1,2,4,5-Tetrachlorobenzene	15.08	216	1131252	66.09		99
25) Isosafrole	15.65	162	725327	75.91		99
26) 1,4-Naphthoquinone	16.18	158	587393	74.51		100
27) 1,3-Dinitrobenzene	16.66	168	710695	70.55		99
28) Thionazin	18.56	248	70493	61.09		65
29) Pentachlorobenzene	17.64	250	1093117	68.25		99
30) 1-Naphthylamine	17.80	143	3007979	72.25		99
31) 2-Naphthylamine	17.99	143	3181064	83.34		99
32) 2,3,4,6-Tetrachlorophenol	18.01	232	727445	67.08		98
33) 5-Nitro-o-toluidine	18.58	152	1149408	82.01		98
34) Diphenylamine	18.78	169	4823453	79.03		99
36) Sulfotep	19.43	322	296612	58.68		92
37) 1,3,5-Trinitrobenzene	19.56	213	321297	75.15		73
38) Phorate	19.59	260	143493	61.20		99

(#) = qualifier out of range (m) = manual integration  
 0918610.D IEAAPDX2.M Fri Sep 19 11:07:47 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918610.D  
 Acq On : 18 Sep 97 5:26 pm  
 Sample : SSTD0806N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 11:06 1997

Vial: 11  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:07:31 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Diallate (isomer 1)	19.56	86	1408060	79.44		98
40) Phenacetin	19.67	108	2364795	90.59		99
41) Diallate (isomer 2)	19.74	86	614009	88.88		97
42) Dimethoate	20.03	229	37663	55.16		96
43) 4-Aminobiphenyl	20.28	169	3576982	84.03		99
44) Pronamide	20.53	173	503690	84.73		100
45) Pentachloronitrobenzene	20.59	237	359157	83.51		99
46) Disulfoton	20.84	274	55946	56.06		92
47) Methylparathion	21.74	263	347236	52.35		90
48) 4-Nitroquinoline-1-oxide	22.69	190	444172	66.25		99
49) Parathion	22.72	291	296503	70.16		90
50) Methapyriline	22.96	97	1712511	99.28		100
51) Isodrin	23.28	193	513666	78.82		99
53) Aramite	24.61	185	56980	100.38		94
54) p-Dimethylaminoazobenzene	24.98	225	765087	74.37		99
55) Chlorobenzilate	25.13	251	1165093	84.23		98
56) 3,3'-Dimethylbenzidine	25.78	212	1521093	85.60		99
57) Kepone	25.78	272	19459	20.44	#	92
58) 2-Acetylaminofluorene	26.44	181	2028492	89.00	TM	99
59) Famphur	27.07	218	26438	45.96	m	62
61) 7,12-Dimethylbenz[a]anthra	29.57	256	1655367	80.02	#	100
62) Hexachlorophene	30.03	196	54229	65.82		91
63) 3-Methylcholanthrene	31.34	268	1855005	77.94		98

(#) = qualifier out of range (m) = manual integration  
 0918610.D IEAAPDX2.M Fri Sep 19 11:07:49 1997

MSD6

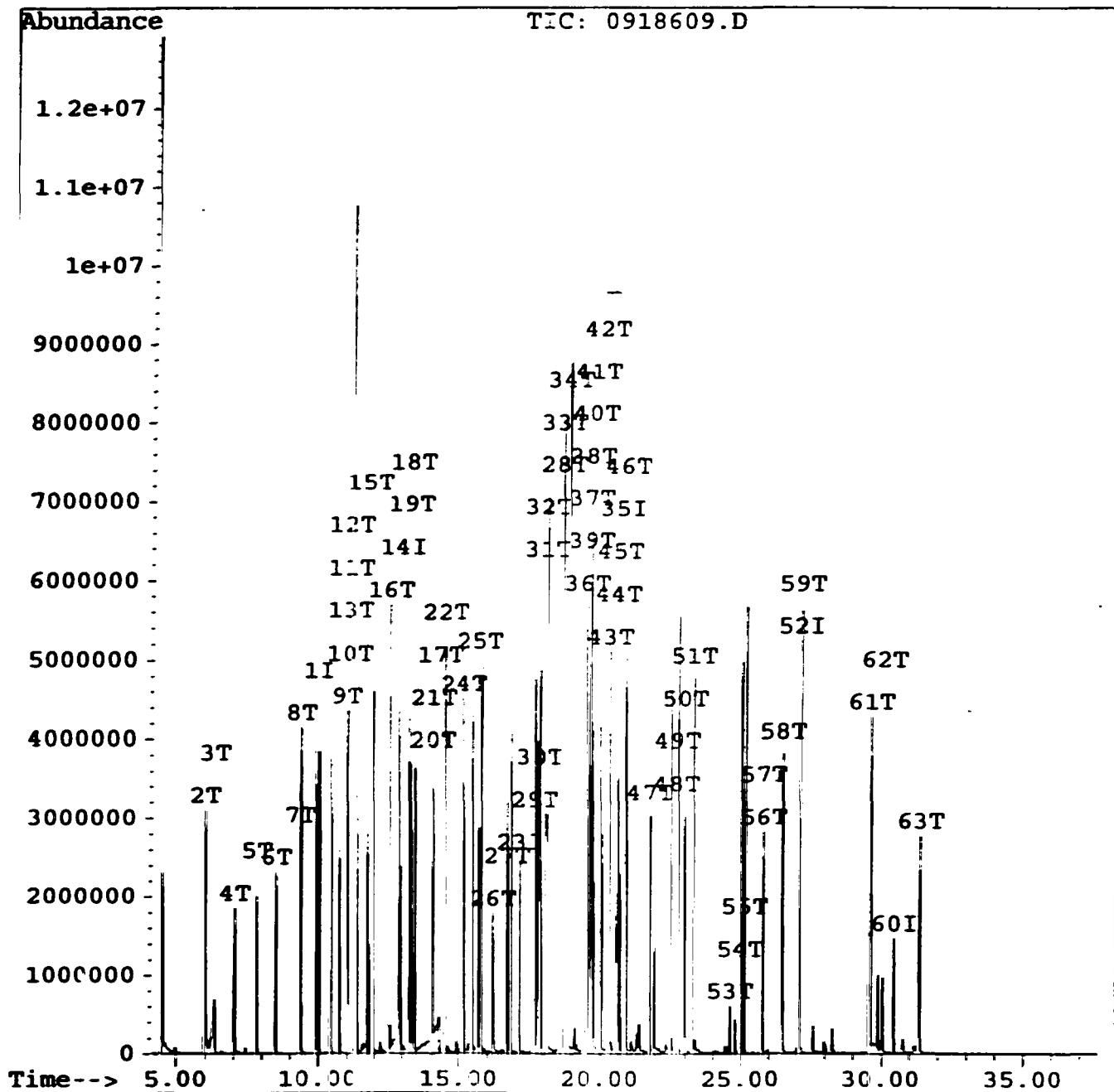
Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918609.D  
 Acq On : 18 Sep 97 4:40 pm  
 Sample : SSTD1206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:58 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:00:17 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918609.D  
 Acq On : 18 Sep 97 4:40 pm  
 Sample : SSTD1206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:58 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:00:17 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-d4	9.95	152	419167	40.00		0.01
14) Naphthalene-d8	12.88	136	1841663	40.00		0.00
23) Acenaphthene-d10	17.12	164	1145616	40.00		0.01
35) Phenanthrene-d10	20.67	188	1934630	40.00		0.02
52) Chrysene-d12	27.07	240	1278125	40.00		0.00
60) Perylene-d12	30.44	264	1318193	40.00		0.02

## System Monitoring Compounds %Recovery

Target Compounds					Qvalue
2) 2-Picoline	5.99	93	2104847	124.60	99
3) N-Nitrosomethylmethylethylamine	6.34	88	1205244	137.34	98
4) Methyl methanesulfonate	7.03	80	1716163	146.80	96
5) N-Nitrosodiethylamine	7.81	102	1044754	121.64	99
6) Ethyl methanesulfonate	8.49	79	2182603	127.42	100
7) Pentachloroethane	9.31	167	725544	134.39	98
8) Aniline	9.34	93	3059697	117.30	99
9) Acetophenone	10.94	105	2824312	126.79	100
10) N-Nitrosopyrrolidine	11.02	100	1174850	117.08	# 2
11) N-Nitrosomorpholine	11.04	56	1281652	134.24	98
12) o-Toluidine	11.06	106	2371745	111.22	# DL 1
13) 3-Methylphenol	11.04	108	3706504	246.49	m 83
15) N-Nitrosopiperidine	11.70	114	1272689	118.93	99
16) O,O,O-Triethylphosphorothioate	12.46	198	775261	111.72	98
17) a,a-Dimethylphenethylamine	14.26	58	7548132	121.41	m 59
18) Hexachloropropene	13.23	213	1069635	121.80	99
19) 2,6-Dichlorophenol	13.16	162	1806512	116.19	98
20) 1,4-Phenylenediamine	14.00	108	456733	32.04	m 88
21) N-Nitrosodi-n-butylamine	14.02	84	1533980	116.50	97
22) Safrole	14.43	162	1436156	111.95	96
24) 1,2,4,5-Tetrachlorobenzene	15.08	216	1550179	107.52	99
25) Isosafrole	15.65	162	929137	115.43	98
26) 1,4-Naphthoquinone	16.19	158	759256	114.33	99
27) 1,3-Dinitrobenzene	16.67	168	971660	114.51	98
28) Thionazin	18.57	248	96688	99.48	59
29) Pentachlorobenzene	17.64	250	1473362	109.21	99
30) 1-Naphthylamine	17.81	143	4067850	115.99	99
31) 2-Naphthylamine	18.00	143	3937375	122.47	99
32) 2,3,4,6-Tetrachlorophenol	18.02	232	963032	105.42	99
33) 5-Nitro-o-toluidine	18.59	152	1564848	132.55	96
34) Diphenylamine	18.79	169	6218708	120.96	99
36) Sulfoteppep	19.44	322	440632	97.17	100
37) 1,3,5-Trinitrobenzene	19.58	213	444883	116.00	60
38) Phorate	19.60	260	190459	90.55	92

(#) = qualifier out of range (m) = manual integration

0918609.D IEAAPDX2.M Fri Sep 19 11:00:38 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918609.D  
 Acq On : 18 Sep 97 4:40 pm  
 Sample : SSTD1206N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:58 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:00:17 1997  
 Response via : Initial Calibration

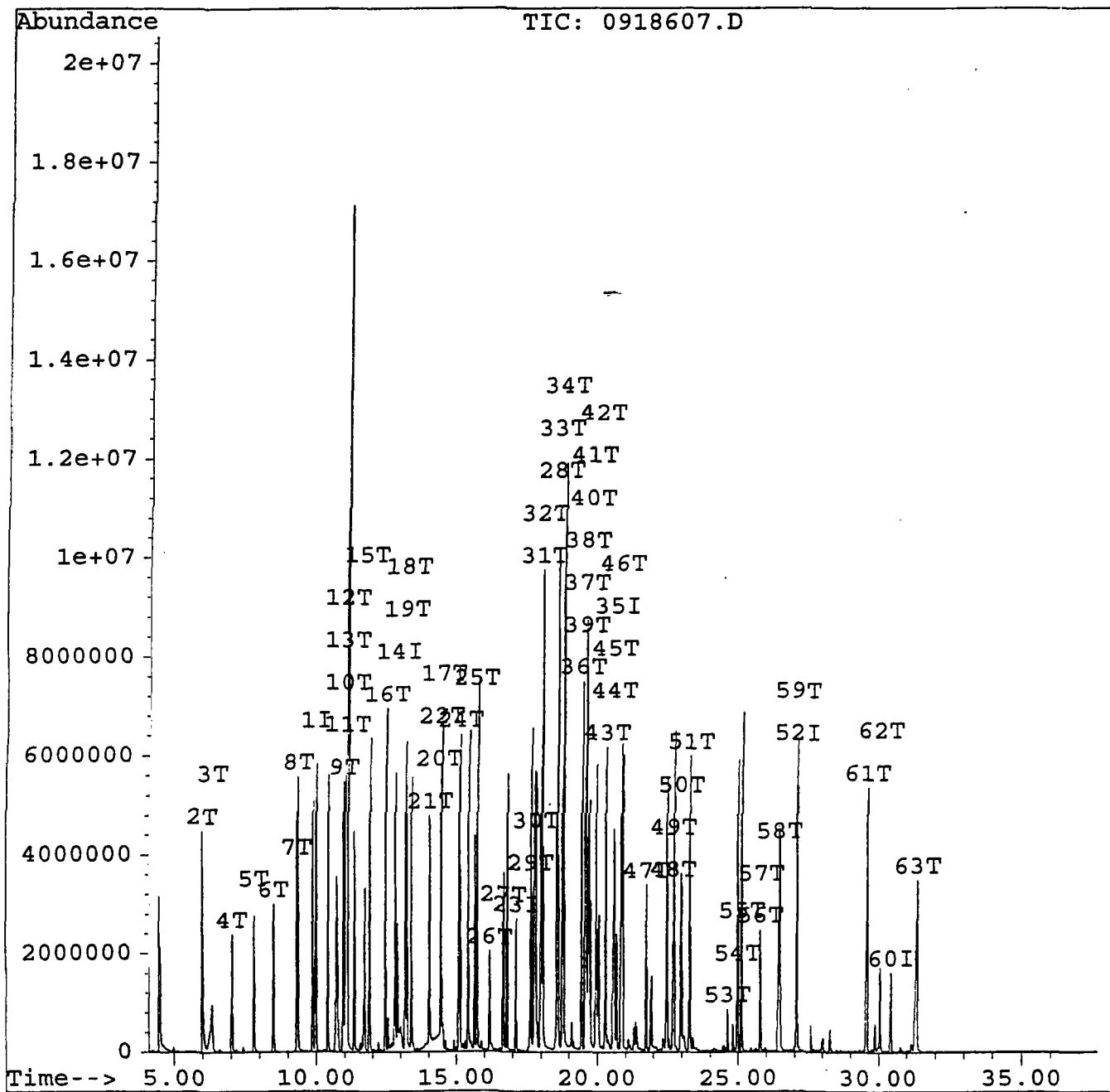
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Diallate (isomer 1)	19.57	86	1890181	118.88		97
40) Phenacetin	19.69	108	3213766	137.25		99
41) Diallate (isomer 2)	19.75	86	846273	136.56		99
42) Dimethoate	20.04	229	41351	67.51		90
43) 4-Aminobiphenyl	20.29	169	4460358	116.81		99
44) Pronamide	20.54	173	673052	126.22		99
45) Pentachloronitrobenzene	20.59	237	480731	124.61		100
46) Disulfoton	20.84	274	84477	94.36	#	55
47) Methylparathion	21.75	263	405909	68.21		95
48) 4-Nitroquinoline-1-oxide	22.68	190	475786	79.28		99
49) Parathion	22.72	291	414809	109.42		82
50) Methapyriline	22.97	97	2181488	140.99		100
51) Isodrin	23.27	193	693479	118.62		99
53) Aramite	24.62	185	71984	139.58		95
54) p-Dimethylaminoazobenzene	24.98	225	1036457	110.90		98
55) Chlorobenzilate	25.12	251	1503215	119.62		100
56) 3,3'-Dimethylbenzidine	25.78	212	1885227	116.78		98
57) Kepone	25.80	272	5095	5.89	#	89
58) 2-Acetylaminofluorene	26.46	181	2728506	131.77		99
59) Famphur	27.08	218	34349	65.72	#	22
61) 7,12-Dimethylbenz[a]anthra	29.58	256	2396981	131.16	#	100
62) Hexachlorophene	30.04	196	186239	255.90		97
63) 3-Methylcholanthrene	31.35	268	2510018	119.37		98

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918607.D  
Acq On : 18 Sep 97 3:08 pm  
Sample : SSTD1606N SVCLP619-A  
Misc : WATER LOW 1X... IEA MSD6  
Quant Time: Sep 19 10:37 1997

Vial: 8  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
Title :  
Last Update : Fri Sep 19 10:40:54 1997  
Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918607.D  
 Acq On : 18 Sep 97 3:08 pm  
 Sample : SSTD1606N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:37 1997

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 10:40:54 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min.)
1) 1,4-dichlorobenzene-d4	9.95	152	499707	40.00		0.01
14) Naphthalene-d8	12.89	136	1997821	40.00		0.02
23) Acenaphthene-d10	17.12	164	1260474	40.00		0.01
35) Phenanthrene-d10	20.69	188	1910908	40.00		0.03
52) Chrysene-d12	27.07	240	1402472	40.00		0.00
60) Perylene-d12	30.44	264	1434828	40.00		0.02

## System Monitoring Compounds

%Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min.)	Qvalue
2) 2-Picoline	6.00	93	2992760	148.61			100
3) N-Nitrosomethylmethylethylamine	6.34	88	1760666	168.30			98
4) Methyl methanesulfonate	7.05	80	2469565	177.20			97
5) N-Nitrosodiethylamine	7.81	102	1494349	145.95			99
6) Ethyl methanesulfonate	8.51	79	3297037	161.46			99
7) Pentachloroethane	9.31	167	1056306	164.13			95
8) Aniline	9.35	93	4416106	142.02			99
9) Acetophenone	10.94	105	4091387	154.07			100
10) N-Nitrosopyrrolidine	11.05	100	1763075	147.38			92
11) N-Nitrosomorpholine	11.04	56	1997642	175.51			97
12) o-Toluidine	11.07	106	3654189	143.74	#	1	
13) 3-Methylphenol	11.06	108	5856199	326.67	m	83	
15) N-Nitrosopiperidine	11.72	114	1790161	154.21			99
16) O,O,O-Triethylphosphorothioate	12.47	198	1076473	143.00			97
17) a,a-Dimethylphenethylamine	14.50	58	10506812	155.79	m	76	
18) Hexachloropropene	13.23	213	1494016	156.82			
19) 2,6-Dichlorophenol	13.17	162	2574888	152.67			99
20) 1,4-Phenylenediamine	14.32	108	519411	33.59	m	50	
21) N-Nitrosodi-n-butylamine	14.02	84	2148133	150.38			98
22) Safrole	14.43	162	2041548	146.70			98
24) 1,2,4,5-Tetrachlorobenzene	15.09	216	2316225	146.01			99
25) Isosafrole	15.66	162	1385228	156.42			98
26) 1,4-Naphthoquinone	16.19	158	893540	122.29			98
27) 1,3-Dinitrobenzene	16.68	168	1295522	138.77			100
28) Thionazin	18.59	248	124162	116.11			65
29) Pentachlorobenzene	17.65	250	2077734	139.97			99
30) 1-Naphthylamine	17.82	143	5178441	134.20	m	100	
31) 2-Naphthylamine	18.03	143	5214866	147.42			99
32) 2,3,4,6-Tetrachlorophenol	18.04	232	1433331	142.61			99
33) 5-Nitro-o-toluidine	18.62	152	2150510	165.56			96
34) Diphenylamine	18.80	169	8976654	158.69			99
36) Sulfotep	19.45	322	621122	138.68			96
37) 1,3,5-Trinitrobenzene	19.59	213	626892	165.49			58
38) Phorate	19.62	260	297288	143.09			68

( # ) = qualifier out of range ( m ) = manual integration

0918607.D IEAAPDX2.M Fri Sep 19 10:41:10 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709186.B\0918607.D  
 Acq On : 18 Sep 97 3:08 pm  
 Sample : SSTD1606N SVCLP619-A  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 10:37 1997

Vial: 8  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 10:40:54 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Diallate (isomer 1)	19.57	86	2666237	169.77		96
40) Phenacetin	19.72	108	4441272	192.02		98
41) Diallate (isomer 2)	19.76	86	1159053	189.35		93
42) Dimethoate	20.05	229	41765	69.03		99
43) 4-Aminobiphenyl	20.30	169	5666998	150.25		99
44) Pronamide	20.56	173	923473	175.33		96
45) Pentachloronitrobenzene	20.60	237	664402	174.35		98
46) Disulfoton	20.86	274	108833	123.08	#	55
47) Methylparathion	21.74	263	435433	74.08		99
48) 4-Nitroquinoline-1-oxide	22.69	190	407611	68.62		99
49) Parathion	22.73	291	501148	133.83		89
50) Methapyriline	22.98	97	2709508	177.29	m	99
51) Isodrin	23.28	193	916559	158.73	M	96
53) Aramite	24.62	185	97791	172.81		95
54) p-Dimethylaminoazobenzene	24.99	225	1317801	128.51		97
55) Chlorobenzilate	25.14	251	2112032	153.16		98
56) 3,3'-Dimethylbenzidine	25.78	212	1814497	102.44		99
57) Kepone	25.82	272	307	0.32	#	32
58) 2-Acetylaminofluorene	26.47	181	3809759	167.68		99
59) Famphur	27.08	218	46327	80.78	m	1
61) 7,12-Dimethylbenz[a]anthra	29.59	256	3191540	160.44	#	100
62) Hexachlorophene	30.04	196	348351	439.74		99
63) 3-Methylcholanthrene	31.37	268	3459502	151.16		97

(#) = qualifier out of range (m) = manual integration  
 0918607.D IEAAPDX2.M Fri Sep 19 10:41:12 1997

MSD6

Page 2

7B  
LOW CONC. WATER SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD6

Calibration Date: 09/19/97 Time: 08:49

Lab File ID: 0919601.D Init. Calib. Date(s): 09/18/97 09/18/97

Init. Calib. Times: 10:24 13:36

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.984	2.127	0.800	-7.2	20.0
Bis(2-Chloroethyl) Ether	1.653	1.676	0.700	-1.4	20.0
2-Chlorophenol	1.413	1.650	0.700	-16.8	20.0
1,3-Dichlorobenzene	1.515	1.579		-4.2	
1,4-Dichlorobenzene	1.524	1.660		-8.9	
1,2-Dichlorobenzene	1.448	1.548		-6.9	
2-Methylphenol	1.521	1.523	0.700	-0.1	20.0
2,2'-oxybis(1-Chloropropane)	2.030	1.844		9.2	
4-Methylphenol	1.650	1.565	0.600	5.2	20.0
N-Nitroso-Di-N-Propylamine	1.503	1.311	0.500	12.8	20.0
Hexachloroethane	0.689	0.674	0.300	2.2	20.0
Nitrobenzene	0.456	0.473	0.200	-3.8	20.0
Isophorone	1.094	1.000	0.400	8.6	20.0
2-Nitrophenol	0.245	0.269	0.100	-9.9	30.0
2,4-Dimethylphenol	0.429	0.399	0.200	7.0	30.0
Bis(2-Chloroethoxy) Methane	0.627	0.549	0.300	12.4	20.0
2,4-Dichlorophenol	0.343	0.355	0.200	-3.3	20.0
1,2,4-Trichlorobenzene	0.312	0.347	0.200	-11.0	20.0
Naphthalene	1.028	1.031	0.700	-0.3	20.0
4-Chloroaniline	0.525	0.570		-8.6	
Hexachlorobutadiene	0.160	0.202		-26.4	
4-Chloro-3-Methylphenol	0.430	0.412	0.200	4.1	20.0
2-Methylnaphthalene	0.697	0.698	0.400	-0.1	20.0
Hexachlorocyclopentadiene	0.333	0.413		-23.8	
2,4,6-Trichlorophenol	0.424	0.461	0.200	-8.9	20.0
2,4,5-Trichlorophenol	0.414	0.416	0.200	-0.6	20.0
2-Chloronaphthalene	1.203	1.277	0.800	-6.1	20.0
2-Nitroaniline	0.469	0.406		13.4	
Dimethylphthalate	1.633	1.651		-1.1	
Acenaphthylene	1.989	2.074	1.300	-4.3	20.0
2,6-Dinitrotoluene	0.374	0.407	0.200	-8.8	20.0
3-Nitroaniline	0.446	0.437		2.0	
Acenaphthene	1.156	1.170	0.800	-1.2	20.0
2,4-Dinitrophenol	0.237	0.306		-29.2	
4-Nitrophenol	0.262	0.242		7.8	
Dibenzo[furan	1.678	1.583	0.800	5.6	20.0
2,4-Dinitrotoluene	0.556	0.615	0.200	-10.6	30.0

All other compounds must meet a minimum RRF of 0.010.

7C  
LOW CONC. WATER SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD6

Calibration Date: 09/19/97 Time: 08:49

Lab File ID: 0919601.D

Init. Calib. Date(s): 09/18/97 09/18/97

Init. Calib. Times: 10:24 13:36

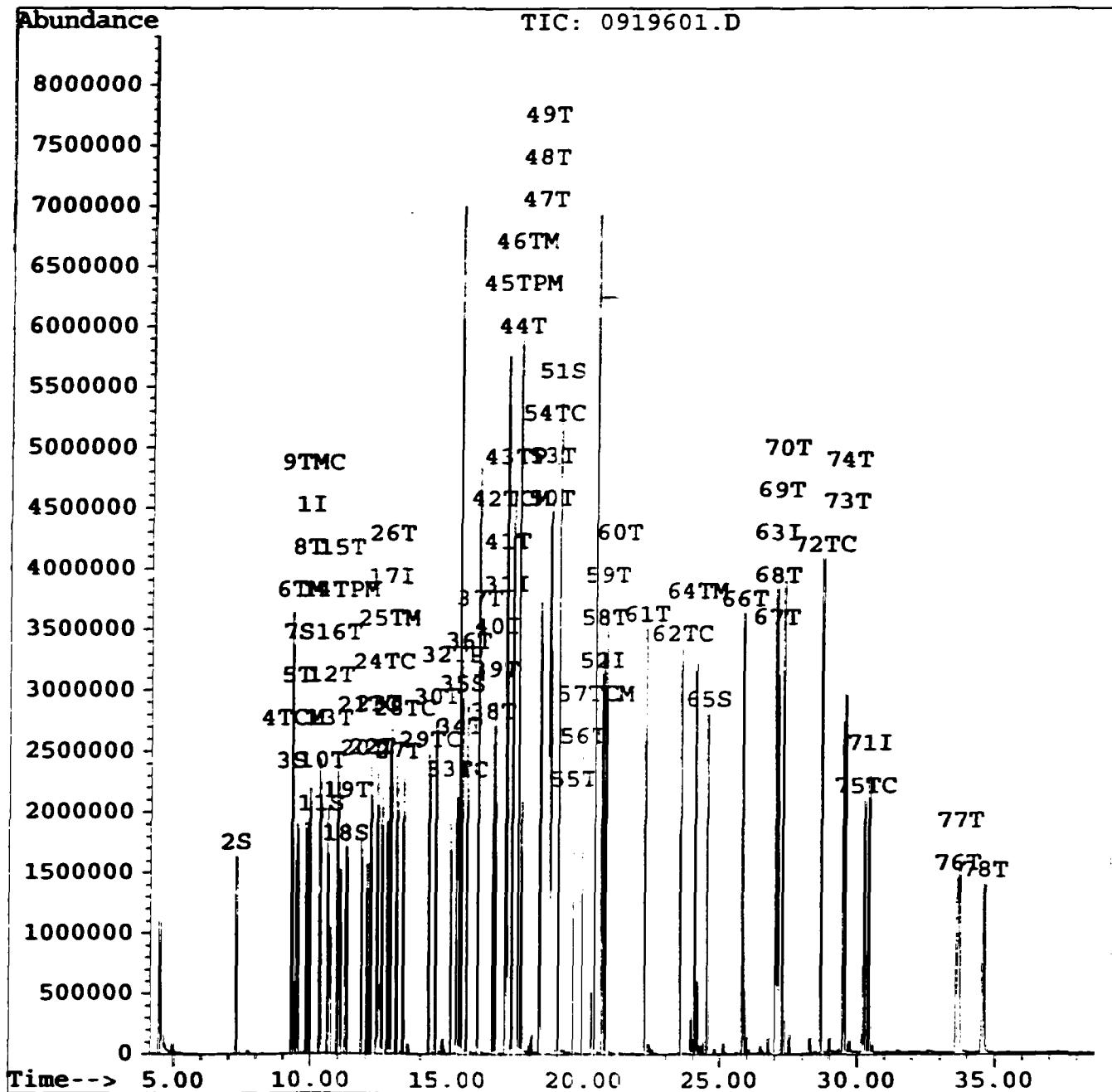
COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.826	1.830		-0.2	
4-Chlorophenyl-phenylether	0.560	0.644	0.400	-15.0	20.0
Fluorene	1.403	1.392	0.900	0.8	20.0
4-Nitroaniline	0.529	0.507		4.2	
4,6-Dinitro-2-Methylphenol	0.165	0.189		-14.6	
N-Nitrosodiphenylamine (1)	0.551	0.592		-7.3	
4-Bromophenyl-phenylether	0.168	0.179	0.100	-6.3	20.0
Hexachlorobenzene	0.219	0.267	0.100	-22.2	20.0
Pentachlorophenol	0.161	0.189	0.050	-17.1	20.0
Phenanthrene	1.033	1.037	0.700	-0.4	20.0
Anthracene	1.022	1.111	0.700	-8.7	20.0
Carbazole	1.080	1.052		2.5	
Di-N-Butylphthalate	1.587	1.544		2.7	
Fluoranthene	1.050	1.121	0.600	-6.7	20.0
Pyrene	1.667	1.550	0.600	7.0	20.0
Butylbenzylphthalate	1.214	1.061		12.7	
3,3'-Dichlorobenzidine	0.495	0.528		-6.7	
Benzo(a)Anthracene	1.358	1.297	0.800	4.5	20.0
Chrysene	1.272	1.215	0.700	4.5	20.0
Bis(2-Ethylhexyl)Phthalate	1.457	1.305		10.5	
Di-N-Octylphthalate	2.667	2.114		20.7	
Benzo(b)Fluoranthene	1.356	1.371	0.700	-1.1	20.0
Benzo(k)Fluoranthene	1.136	1.093	0.700	3.8	20.0
Benzo(a)Pyrene	1.143	1.070	0.700	6.5	20.0
Indeno(1,2,3-Cd)Pyrene	1.369	1.368	0.500	0.1	20.0
Dibenz(A,H)Anthracene	1.049	1.042	0.400	0.7	20.0
Benzo(G,H,I)Perylene	1.180	1.181	0.500	0.0	20.0
Nitrobenzene-D5	0.481	0.497		-3.3	
2-Fluorobiphenyl	1.266	1.383	0.700	-9.2	20.0
Terphenyl-D14	0.978	0.991	0.500	-1.3	20.0
Phenol-D5	2.089	2.226	0.800	-6.5	20.0
2-Fluorophenol	1.565	1.644	0.600	-5.0	20.0
2,4,6-Tribromophenol	0.214	0.265		-23.8	

(1) Cannot be separated from Diphenylamine  
All other compounds must meet a minimum RRF of 0.010.

Data File : C:\HPCHEM\1\DATA\9709196.B\0919601.D  
Acq On : 19 Sep 97 8:49 am  
Sample : SSTD0406P SVCLP621-D  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 19 9:54 1997

Vial: 2  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

**Method** : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
**Title** :  
**Last Update** : Fri Sep 19 09:55:08 1997  
**Response via** : Multiple Level Calibration.



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919601.D  
 Acq On : 19 Sep 97 8:49 am  
 Sample : SSTD0406P SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 9:54 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.93	152	623617	40.00		0.00
17) Naphthalene-d8	12.87	136	2463025	40.00		0.00
31) Acenaphthene-d10	17.11	164	1447685	40.00		0.00
52) Phenanthrene-d10	20.65	188	2735943	40.00		0.00
63) Chrysene-d12	27.07	240	2007405	40.00		0.00
71) Perylene-d12	30.42	264	2227801	40.00		0.00

## System Monitoring Compounds

System Monitoring Compounds				%Recovery
2) 2-Fluorophenol	7.29	112	1024971	42.02
3) Phenol-d5	9.29	99	1388160	42.62
7) 2-Chlorophenol-d4	9.51	132	975947	44.76
11) 1,2-Dichlorobenzene-d4	10.36	152	633910	43.20
18) Nitrobenzene-d5	11.27	82	1223902	41.33
35) 2-Fluorobiphenyl	15.52	172	2002075	43.69
51) 2,4,6-Tribromophenol	19.06	330	1533062	198.10
65) Terphenyl-d14	24.57	244	1988387	40.52

## Target Compounds

Target Compounds				Qvalue
4) Phenol	9.32	94	1326656	42.90
5) Bis(2-Chloroethyl)ether	9.47	93	1044906	40.56
6) 2-Chlorophenol	9.55	128	1029178	46.71
8) 1,3-Dichlorobenzene	9.85	146	984403	41.66
9) 1,4-Dichlorobenzene	9.97	146	1035260	43.57
10) 1,2-Dichlorobenzene	10.39	146	965292	42.76
12) 2,2'-oxybis(1-Chloropropan)	10.67	45	1149804	36.33
13) 2-Methylphenol	10.64	108	949532	40.05
14) N-Nitroso-di-n-propylamine	11.00	70	817348	34.89
15) Hexachloroethane	11.07	117	420585	39.13
16) 4-Methylphenol	10.97	108	975845	37.92
19) Nitrobenzene	11.30	77	1165665	41.50
20) Isophorone	11.85	82	2464020	36.56
21) 2-Nitrophenol	12.04	139	663770	43.98
22) 2,4-Dimethylphenol	12.18	107	983096	37.21
23) bis(2-Chloroethoxy)methane	12.41	93	1353257	35.06
24) 2,4-Dichlorophenol	12.59	162	873275	41.33
25) 1,2,4-Trichlorobenzene	12.78	180	854330	44.40
26) Naphthalene	12.92	128	2539482	40.13
27) 4-Chloroaniline	13.13	127	1403691	43.45
28) Hexachlorobutadiene	13.36	225	496569	50.55
29) 4-Chloro-3-methylphenol	14.30	107	1014905	38.36
30) 2-Methylnaphthalene	14.56	142	1718442	40.02
32) Hexachlorocyclopentadiene	15.11	237	597575	49.53
33) 2,4,6-Trichlorophenol	15.32	196	667490	43.54
34) 2,4,5-Trichlorophenol	15.42	196	2408213	160.90

(#) = qualifier out of range (m) = manual integration

0919601.D CLP691.M Fri Sep 19 09:57:10 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919601.D  
 Acq On : 19 Sep 97 8:49 am  
 Sample : SSTD0406P SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 9:54 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 2-Chloronaphthalene	15.72	162	1849303	42.46		96
37) 2-Nitroaniline	16.11	65	2351515	138.57		91
38) Dimethylphthalate	16.63	163	2390172	40.45		99
39) Acenaphthylene	16.72	152	3003135	41.72		99
40) 2,6-Dinitrotoluene	16.78	165	589736	43.52		90
41) 3-Nitroaniline	17.13	138	2531478	156.84		97
42) Acenaphthene	17.19	153	1693389	40.46		99
43) 2,4-Dinitrophenol	17.36	184	1773140	206.75	#	83
44) Dibenzofuran	17.57	168	2291978	37.75		4
45) 4-Nitrophenol	17.58	109	1400883	147.58		91
46) 2,4-Dinitrotoluene	17.72	165	890665	44.26	#	84
47) Diethylphthalate	18.36	149	2648692	40.07		99
48) Fluorene	18.40	166	2015617	39.69		100
49) 4-Chlorophenyl-phenylether	18.43	204	932776	46.01		94
50) 4-Nitroaniline	18.67	138	2938342	153.35		95
53) 4,6-Dinitro-2-Methylphenol	18.72	198	2067680	183.40		92
54) N-Nitrosodiphenylamine (1)	18.76	169	1619555	42.94		97
55) 4-Bromophenyl-phenylether	19.59	248	489373	42.51		93
56) Hexachlorobenzene	19.92	284	730612	48.89	#	89
57) Pentachlorophenol	20.38	266	2065155	187.37		99
58) Phenanthrene	20.70	178	2837965	40.16		99
59) Anthracene	20.81	178	3040191	43.49		99
60) Carbazole	21.24	167	2879418	38.99		99
61) Di-n-butylphthalate	22.27	149	4223640	38.90		100
62) Fluoranthene	23.57	202	3066696	42.69		6
64) Pyrene	24.12	202	3111657	37.20		5
66) Butylbenzylphthalate	25.87	149	2128873	34.93		92
67) Benzo(a)anthracene	27.02	228	2603984	38.20		100
68) 3,3'-Dichlorobenzidine	27.05	252	1059610	42.66		99
69) Chrysene	27.12	228	2439148	38.20		99
70) bis(2-Ethylhexyl)phthalate	27.31	149	2619054	35.81		98
72) Di-n-octylphthalate	28.70	149	4710159	31.72		97
73) Benzo(b)fluoranthene	29.50	252	3053601	40.44	m	98
74) Benzo(k)fluoranthene	29.56	252	2434566	38.47	M	98
75) Benzo(a)pyrene	30.27	252	2382994	37.42	M	98
76) Indeno(1,2,3-cd)pyrene	33.65	276	3047930	39.96	#	86
77) Dibenz(a,h)anthracene	33.72	278	2320306	39.72		97
78) Benzo(g,h,i)perylene	34.63	276	2630619	40.01		92

(#) = qualifier out of range (m) = manual integration  
 0919601.D CLP691.M Fri Sep 19 09:57:13 1997

MSD6

Page 2

7B

LOW CONC. WATER SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Instrument ID: MSD6

Calibration Date: 09/19/97 Time: 08:49

Lab File ID: 0919601A.D

Init. Calib. Date(s): 09/18/97 09/18/97

### Init. Calib. Times:

10:24 13:36

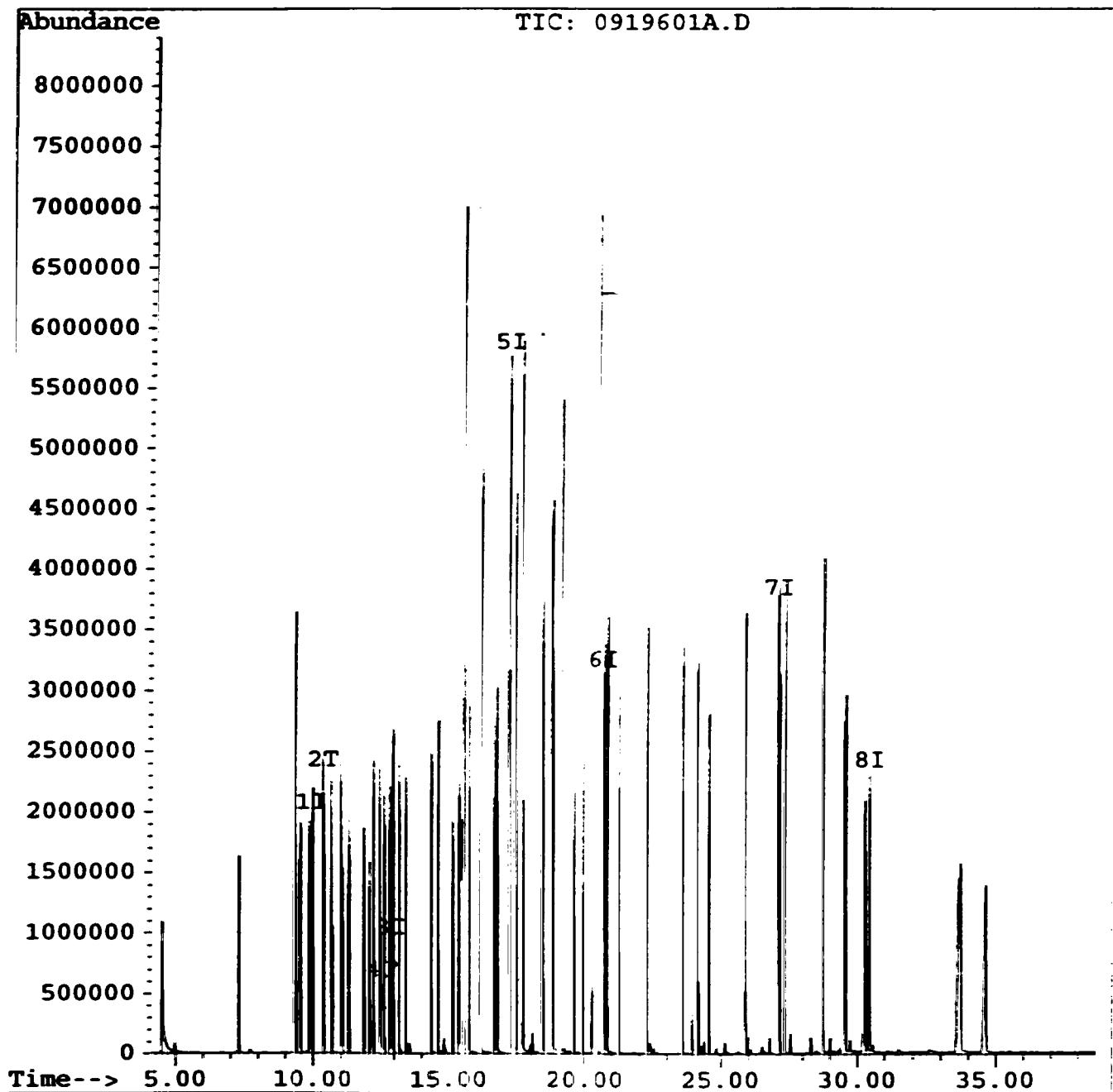
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919601A.D  
Acq On : 19 Sep 97 8:49 am  
Sample : SSTD0406P SVCLP621-D  
Misc : WATER LOW 1X IEA MSD6  
Quant Time: Sep 19 11:27 1997

Vial: 2  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
Title :  
Last Update : Thu Sep 18 15:19:54 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919601A.D  
 Accq On : 19 Sep 97 8:49 am  
 Sample : SSTD0406P SVCLP621-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 11:27 1997

Vial: 2  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
 Title :  
 Last Update : Thu Sep 18 15:19:54 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)--
1) 1,4-dichlorobenzene-d4	9.93	152	623617	40.00		0.00
3) Naphthalene-d8	12.87	136	2463025	40.00		0.00
5) Acenaphthene-d10	17.11	164	1447685	40.00		0.00
6) Phenanthrene-d10	20.65	188	2735943	40.00		0.00
7) Chrysene-d12	27.07	240	2007405	40.00		0.00
8) Perylene-d12	30.42	264	2227801	40.00		0.00

## System Monitoring Compounds %Recovery

Target Compounds				%Value
2) Benzyl Alcohol	10.33	108	739519	40.24
4) Benzoic acid	12.53	122	825745	44.62

7B

**SW-846 SEMIVOLATILE CONTINUING CALIBRATION CHECK**

**Lab Name:** IEA-NC      **Method:** 8270  
**Lab Code:** IEA      **Case No.:** 1364-226      **SDG No.:** 08367  
**Instrument ID:** MSD6      **Calibration Date:** 09/19/97      **Time:** 09:37  
**Lab File ID:** 0919602.D      **Init. Calib. Date(s):** 07/09/97      **07/09/97**  
                                 **Init. Calib. Times:** 19:03      22:13

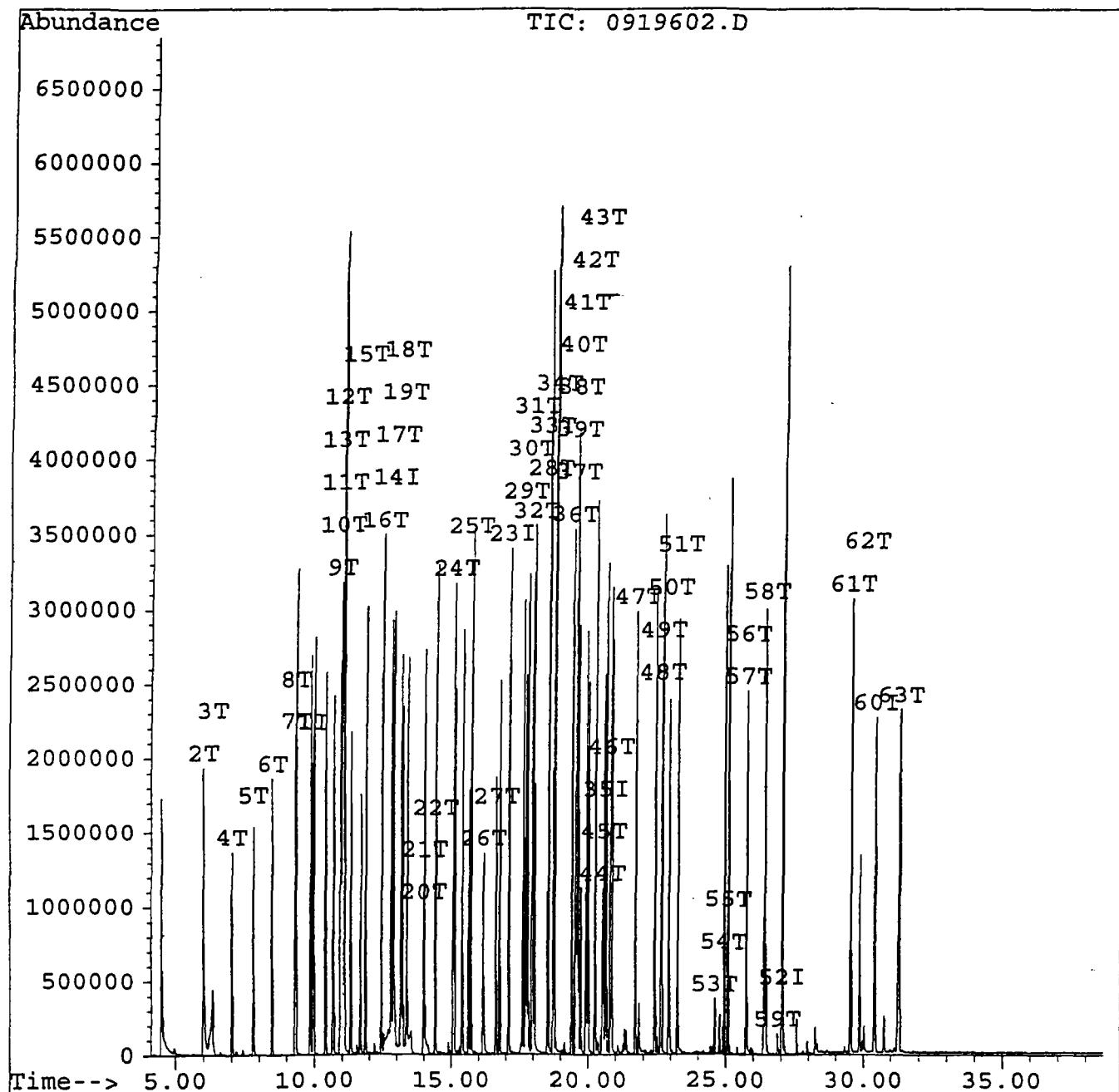
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919602.D  
 Acq On : 19 Sep 97 9:37 am  
 Sample : SSTD0506Q SVCLP619-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 11:48 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Multiple Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919602.D  
 Acq On : 19 Sep 97 9:37 am  
 Sample : SSTD0506Q SVCLP619-D  
 Misc : WATER LOW 1X IEA MSD6  
 Quant Time: Sep 19 11:48 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	697784	40.00		0.00
14) Naphthalene-d8	12.87	136	2646300	40.00		0.00
23) Acenaphthene-d10	17.11	164	1688294	40.00		0.00
35) Phenanthrene-d10	20.65	188	2933688	40.00		-0.01
52) Chrysene-d12	27.05	240	2126058	40.00		-0.02
60) Perylene-d12	30.42	264	2241289	40.00		0.00

## System Monitoring Compounds

%Recovery

Target Compounds					Value
2) 2-Picoline	5.99	93	1452417	48.62	95
3) N-Nitrosomethylmethylethylamine	6.33	88	764027	46.58	95
4) Methyl methanesulfonate	7.01	80	1024688	43.06	97
5) N-Nitrosodiethylamine	7.78	102	736734	49.80	87
6) Ethyl methanesulfonate	8.47	79	1405696	44.53	95
7) Pentachloroethane	9.30	167	489189	50.07	93
8) Aniline	9.32	93	2286193	49.82	95
9) Acetophenone	10.92	105	1817594	44.09	96
10) N-Nitrosopyrrolidine	10.95	100	789989	43.86	90
11) N-Nitrosomorpholine	10.99	56	743322	38.91	96
12) o-Toluidine	11.04	106	1768349	46.02	# 88
13) 3-Methylphenol	11.00	108	2296122	83.73	# 96
15) N-Nitrosopiperidine	11.67	114	770289	45.24	88
16) O,O,O-Triethylphosphorothioate	12.44	198	550661	55.71	83
17) a,a-Dimethylphenethylamine	12.92	58	4094445	42.84	m 75
18) Hexachloropropene	13.21	213	755244	59.18	#
19) 2,6-Dichlorophenol	13.14	162	1179301	51.23	90
20) 1,4-Phenylenediamine	13.96	108	448841	35.80	m 91
21) N-Nitrosodi-n-butylamine	13.99	84	954077	45.56	93
22) Safrole	14.41	162	982778	53.45	89
24) 1,2,4,5-Tetrachlorobenzene	15.06	216	1182283	62.41	98
25) Isosafrole	15.63	152	606740	52.16	91
26) 1,4-Naphthoquinone	16.17	158	695084	58.75	87
27) 1,3-Dinitrobenzene	16.64	168	632307	56.20	# 79
28) Thionazin	18.53	248	65342	59.22	# 28
29) Pentachlorobenzene	17.63	250	1104812	61.70	# 93
30) 1-Naphthylamine	17.78	143	2536723	50.02	95
31) 2-Naphthylamine	17.96	143	2563502	49.26	97
32) 2,3,4,6-Tetrachlorophenol	17.99	232	682307	55.79	94
33) 5-Nitro-o-toluidine	18.55	152	962324	51.20	86
34) Diphenylamine	18.76	169	3670430	47.00	99
36) Sulfoteppep	19.40	322	379340	66.72	# 58
37) 1,3,5-Trinitrobenzene	19.53	213	314005	56.56	# 30
38) Phorate	19.57	260	150184	57.20	# 29

(#) = qualifier out of range (m) = manual integration  
 0919602.D IEAAPDX2.M Fri Sep 19 11:55:12 1997

MSD6

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919602.D  
 Acq On : 19 Sep 97 9:37 am  
 Sample : SSTD0506Q SVCLP619-D  
 Misc : WATER LOW 1X , IEA MSD6  
 Quant Time: Sep 19 11:48 1997

Vial: 3  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Diallate (isomer 1)	19.54	86	1052804	40.66	#	95
40) Phenacetin	19.63	108	1732719	41.40	#	89
41) Diallate (isomer 2)	19.73	86	444737	39.79	#	95
42) Dimethoate	20.01	229	43004	62.35	#	37
43) 4-Aminobiphenyl	20.25	169	2891594	47.45		99
44) Pronamide	20.51	173	398804	44.90		97
45) Pentachloronitrobenzene	20.57	237	340775	53.42	#	86
46) Disulfoton	20.82	274	54066	53.35	#	20
47) Methylparathion	21.73	263	496372	74.10	#	66
48) 4-Nitroquinoline-1-oxide	22.66	190	523054	69.69	#	82
49) Parathion	22.69	291	342412	66.51	#	43
50) Methapyriline	22.94	97	1203715	38.40	#	96
51) Isodrin	23.26	193	462915	49.99	#	80
53) Aramite	24.60	185	55979	54.39		95
54) p-Dimethylaminoazobenzene	24.96	225	800505	54.00	#	72
55) Chlorobenzilate	25.10	251	1113395	52.09	#	76
56) 3,3'-Dimethylbenzidine	25.76	212	1680955	57.37		95
57) Kepone	25.76	272	49159	80.89	#	95
58) 2-Acetylaminofluorene	26.41	181	1793541	46.61		97
59) Famphur	26.87	218	58747	62.90	#	87
61) 7,12-Dimethylbenz[a]anthra	29.54	256	1639790	50.80	#	98
62) Hexachlorophene	30.01	196	39052	18.05	#	98
63) 3-Methylcholanthrene	31.30	268	1924879	54.22	#	92

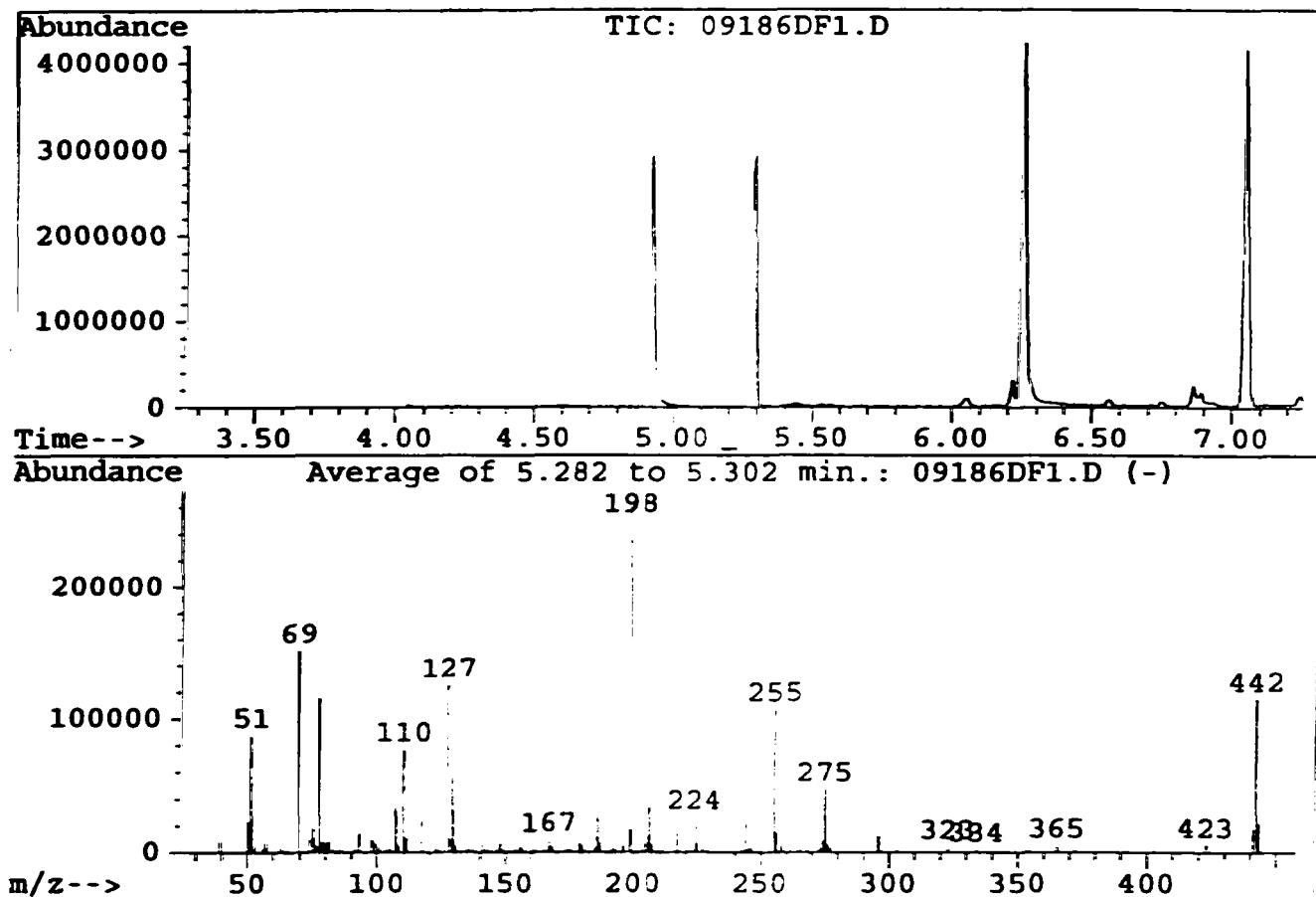
(#) = qualifier out of range (m) = manual integration  
 0919602.D IEAAPDX2.M Fri Sep 19 11:55:17 1997

MSD6 Page 2

Data File : C:\HPCHEM\1\DATA\9709186.B\09186DF1.D  
 Acq On : 18 Sep 97 10:07 am  
 Sample : GCMS TUNING STD 50NG DFTPP SVCLP637  
 Misc : IEA MSD6

Vial: 1  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709186.B\DFTPP.M  
 Title : DFTPP



Peak Apex is scan: 129

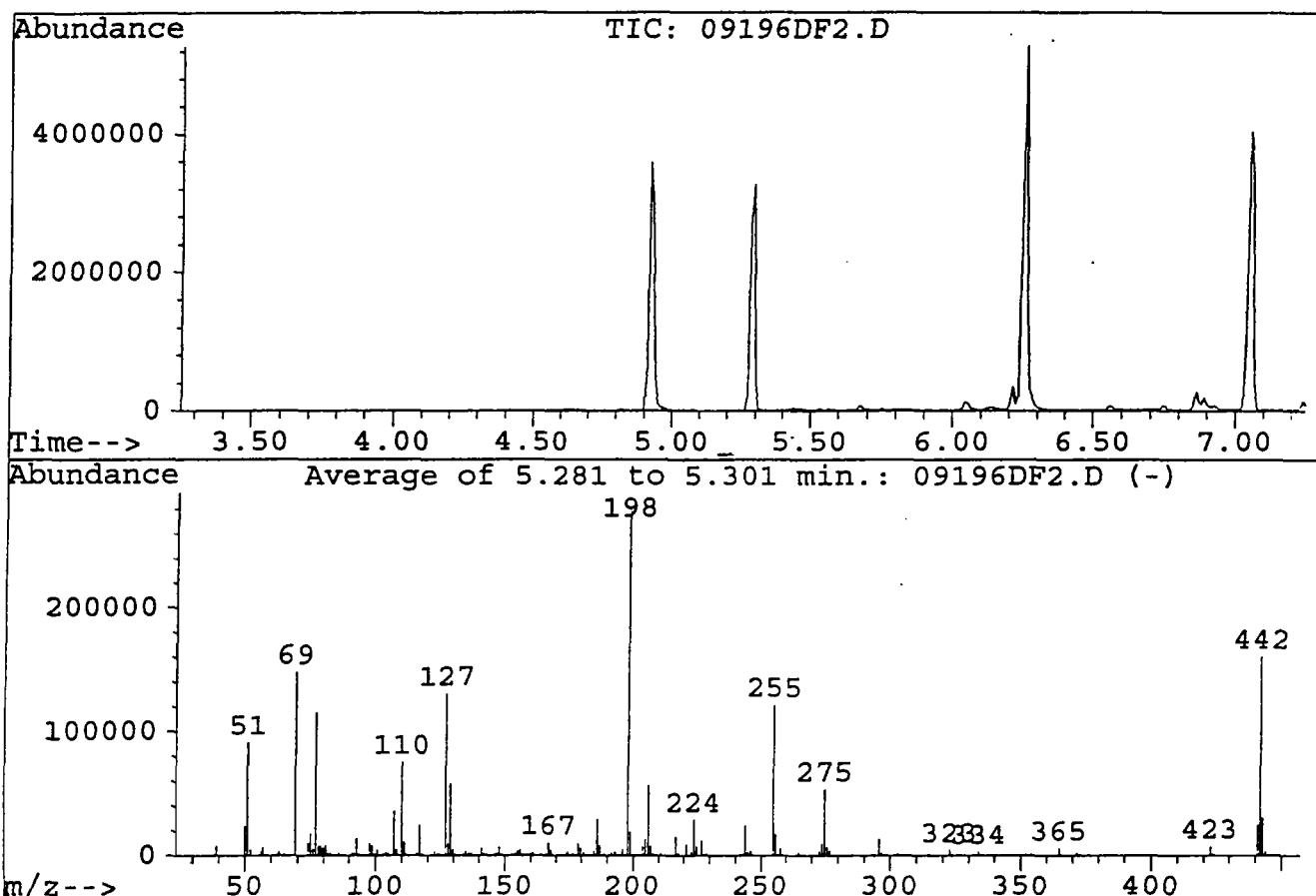
Average of 3 scans: 128,129,130 minus background scan 125

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
51	198	30.00	80.00	33.53	87664	PASS
68	69	0.00	2.00	0.00	0	PASS
69	198	0.00	100.00	57.90	151358	PASS
70	69	0.00	2.00	0.44	660	PASS
127	198	25.00	75.00	47.91	125257	PASS
197	198	0.00	1.00	0.00	0	PASS
198	198	100.00	100.00	100.00	261435	PASS
199	198	5.00	9.00	6.76	17669	PASS
275	198	10.00	30.00	18.01	47078	PASS
365	198	0.75	100.00	1.88	4922	PASS
441	443	0.10	100.00	82.84	18656	PASS
442	198	40.00	110.00	44.03	115099	PASS
443	442	15.00	24.00	19.57	22521	PASS

Data File : C:\HPCHEM\1\DATA\9709196.B\09196DF2.D  
 Acq On : 19 Sep 97 8:33 am  
 Sample : GCMS TUNING STD 50NG DFTPP SVCLP637  
 Misc : IEA MSD6

Vial: 1  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\DFTPP.M  
 Title : DFTPP



Peak Apex is scan: 129

Average of 3 scans: 128,129,130 minus background scan 125

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Relative Abundance%	Raw Abundance	Result Pass/Fail
51	198	30.00	80.00	32.66	91340	PASS
68	69	0.00	2.00	0.00	0	PASS
69	198	0.00	100.00	52.98	148160	PASS
70	69	0.00	2.00	0.42	627	PASS
127	198	25.00	75.00	46.72	130634	PASS
197	198	0.00	1.00	0.00	0	PASS
198	198	100.00	100.00	100.00	279640	PASS
199	198	5.00	9.00	6.92	19341	PASS
275	198	10.00	30.00	19.25	53826	PASS
365	198	0.75	100.00	2.08	5811	PASS
441	443	0.10	100.00	81.26	25243	PASS
442	198	40.00	110.00	57.58	161029	PASS
443	442	15.00	24.00	19.29	31065	PASS

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO

Lab Name: IEA-NC

Method: SOW 10/92

SBLK57

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604.D

Level: (low/med) LOW

Date Received:

\* Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

CAS NO.	COMPOUND			
108-95-2	Phenol	5	U	
111-44-4	Bis(2-Chloroethyl) Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-N-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
111-91-1	Bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC Method: 8270  
Lab Code: IEA Case No.: 1364-226 SDG No.: 08367  
Matrix: (soil/water) WATER Lab Sample ID: SBLK57  
Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0919604A.D  
Level: (low/med) LOW Date Received:  
Moisture: decanted: (Y/N) Date Extracted: 08/21/97  
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/19/97  
Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		
		ug/l	Q	
98-86-2	Acetophenone	10	U	
930-55-2	N-Nitrosopyrrolidine	40	U	
59-89-2	N-Nitrosomorpholine	10	U	
108-39-4	3-Methylphenol	10	U	
99-65-0	1,3-Dinitrobenzene	20	U	
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	
122-39-4	Diphenylamine	10	U	
23950-58-5	Pronamide	10	U	
465-73-6	Isodrin	20	U	
140-57-8	Aramite	50	U	
510-15-6	Chlorobenzilate	10	U	
53-96-3	2-Acetylaminofluorene	20	U	

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919604B.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

Q

100-51-6	Benzyl Alcohol	20	U
65-85-0	Benzoic Acid	50	U

1F CLIE  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

**CLIENT SAMPLE NO.**

SBLK57

Lab Name: IEA-NC

**Method:** SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SBLK57

**Sample wt/vol:** 1000 (g/mL) ml

**Lab File ID:** 0919604.D

**Level:** (low/med) **LOW**

Date Received:

**# Moisture:**      **decanted:** (Y/N)

Date Extracted: 08/21/97

**Concentrated Extract Volume:** 1000 (uL)

**Date Analyzed:** 09/19/97

**Injection Volume:** 2 (uL)

Dilution Factor: 1.0

**GPC Cleanup:** (Y/N) N      **pH:**

Number TICs Found: 0

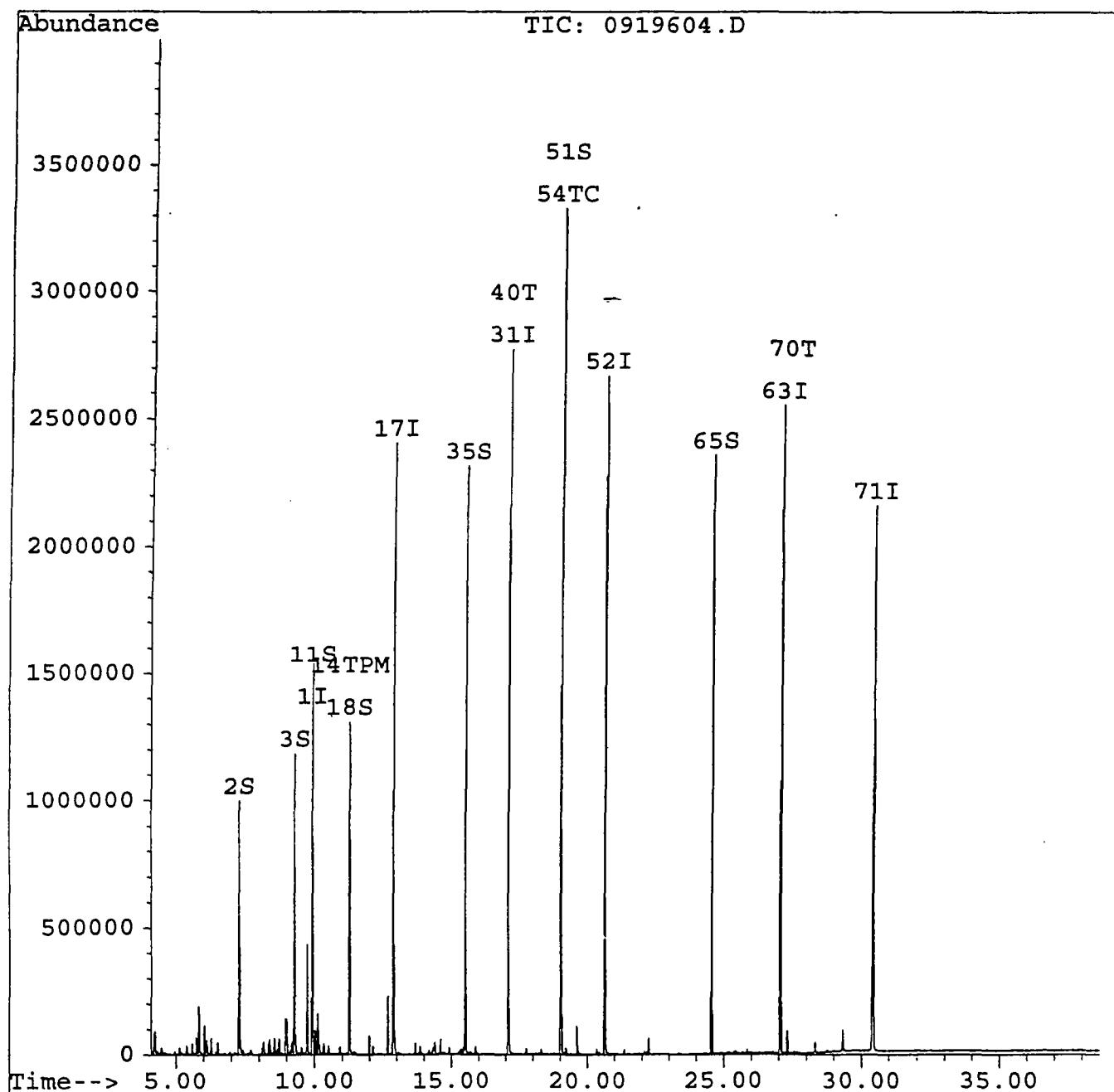
**CONCENTRATION UNITS:**  
**(ug/L or ug/Kg)    ug/l**

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919604.D  
Acq On : 19 Sep 97 11:16 am  
Sample : SBLK57  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 11:55 1997

Vial: 5  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919604.D  
 Acq On : 19 Sep 97 11:16 am  
 Sample : SBLK57  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 11:55 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	519925	40.00		0.00
17) Naphthalene-d8	12.86	136	2141826	40.00		0.00
31) Acenaphthene-d10	17.11	164	1428573	40.00		0.00
52) Phenanthrene-d10	20.63	188	2311660	40.00		-0.02
63) Chrysene-d12	27.06	240	1973474	40.00		0.00
71) Perylene-d12	30.41	264	2061347	40.00		0.00

System Monitoring Compounds	%Recovery
2) 2-Fluorophenol	69.39%
3) Phenol-d5	72.16%
7) 2-Chlorophenol-d4	0.000%
11) 1,2-Dichlorobenzene-d4	98.333%
18) Nitrobenzene-d5	82.495%
35) 2-Fluorobiphenyl	69.649%
51) 2,4,6-Tribromophenol	78.958%
65) Terphenyl-d14	74.344%

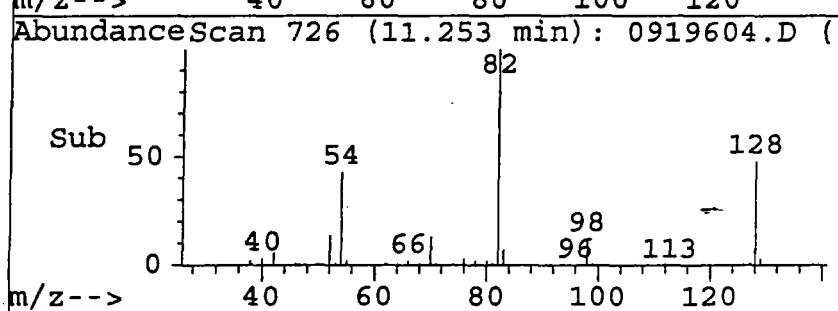
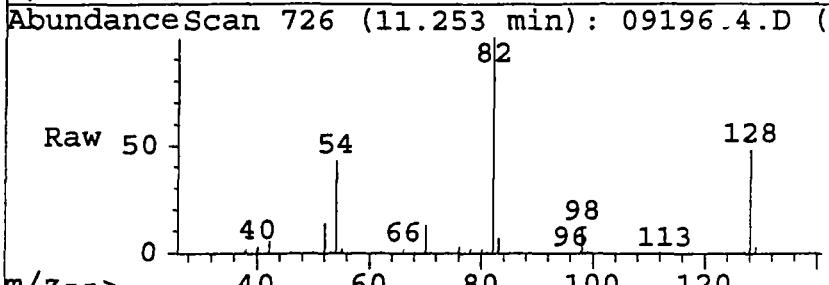
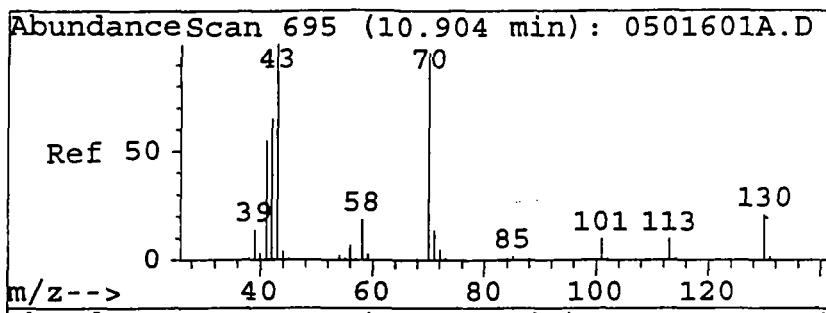
Target Compounds	Qvalue
14) N-Nitroso-di-n-propylamine	# 82
40) 2,6-Dinitrotoluene	# 37
54) N-Nitrosodiphenylamine (1)	# 30
70) bis(2-Ethylhexyl)phthalate	# 97

SF 9/24/97

(#) = qualifier out of range (m) = manual integration  
 0919604.D CLP691.M Fri Sep 19 11:55:57 1997

MSD6

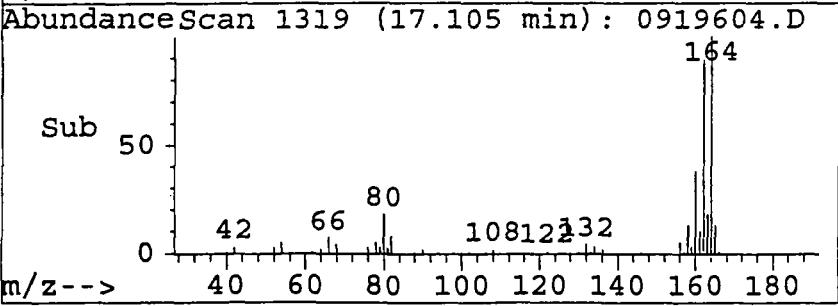
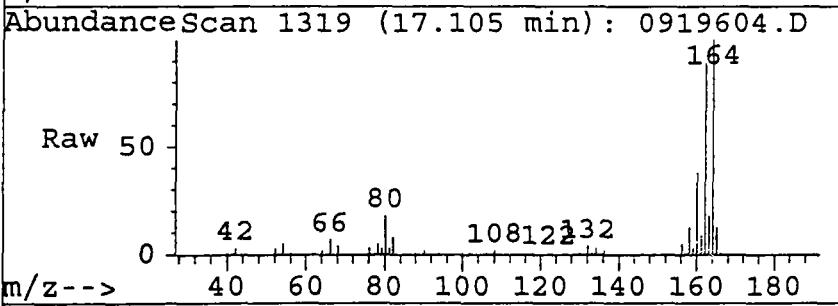
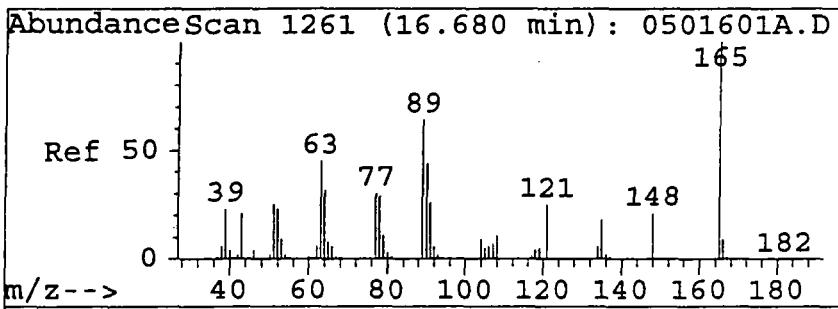
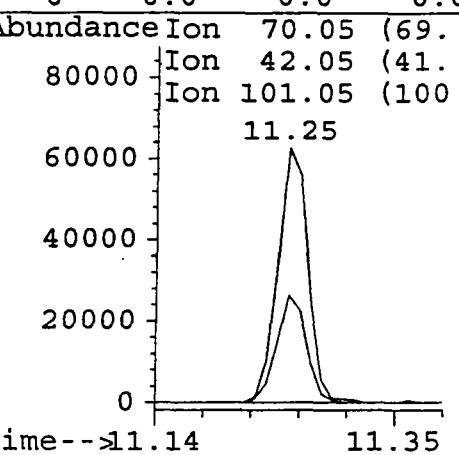
Page 1



#14  
N-Nitroso-di-n-propylamine  
Concen: 6.79  
RT: 11.25 min Scan# 726  
Delta R.T. 0.25 min  
Lab File: 0919604.D  
Acq: 19 Sep 97 11:16 am

Tgt Ion: 70.05 Resp: 115749

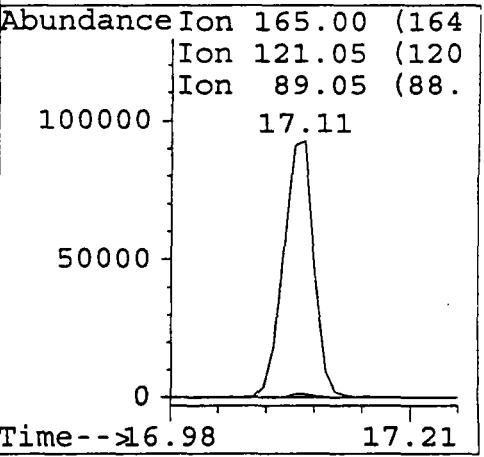
Ion	Ratio	Lower	Upper
70	100		
42	41.7	42.2	63.3#
101	0.0	8.5	12.7#
0	0.0	0.0	0.0

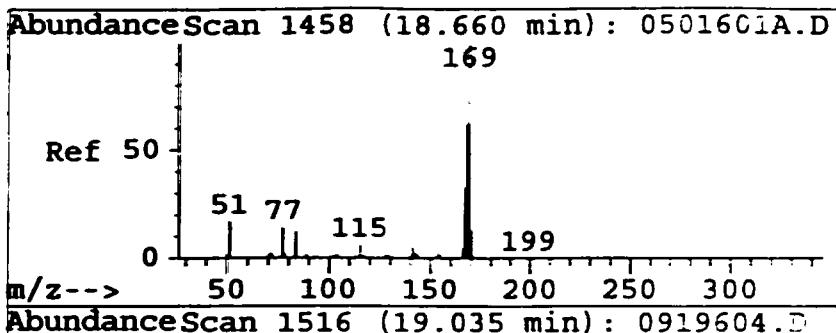


#40  
2,6-Dinitrotoluene  
Concen: 12.77  
RT: 17.11 min Scan# 1319  
Delta R.T. 0.32 min  
Lab File: 0919604.D  
Acq: 19 Sep 97 11:16 am

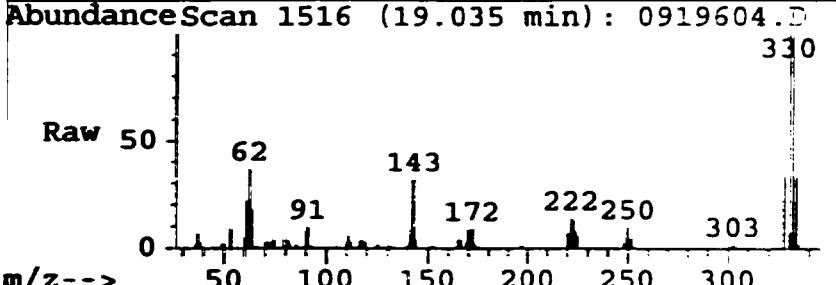
Tgt Ion: 165 Resp: 185781

Ion	Ratio	Lower	Upper
165	100		
121	0.0	16.3	24.4#
89	0.9	39.6	59.3#
0	0.0	0.0	0.0

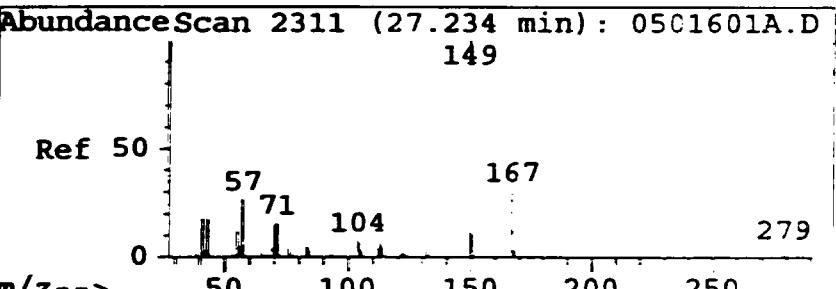
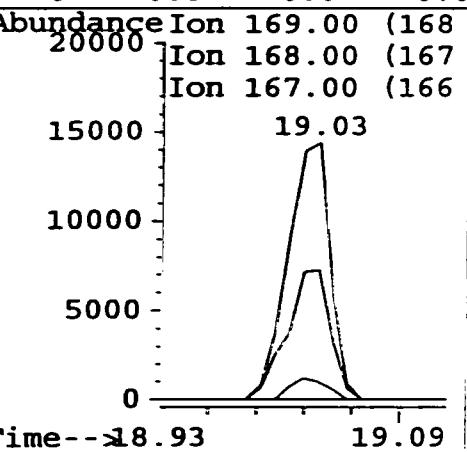
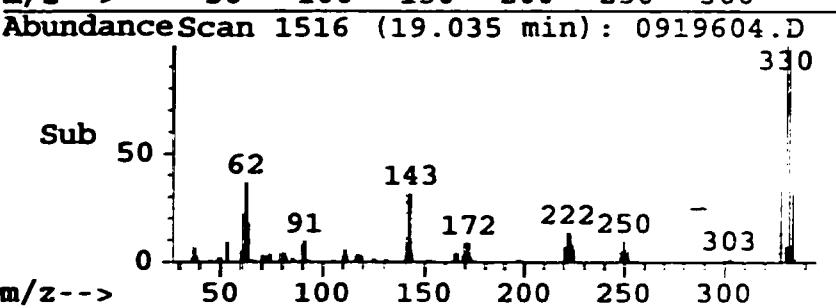




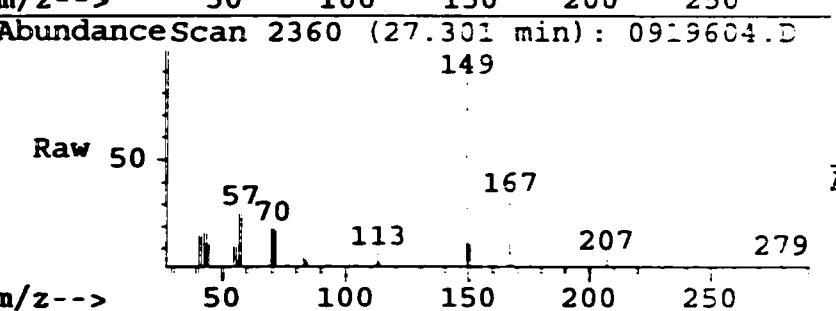
#54  
N-Nitrosodiphenylamine (1)  
Concen: 0.84  
RT: 19.03 min Scan# 1516  
Delta R.T. 0.27 min  
Lab File: 0919604.D  
Acq: 19 Sep 97 11:16 am



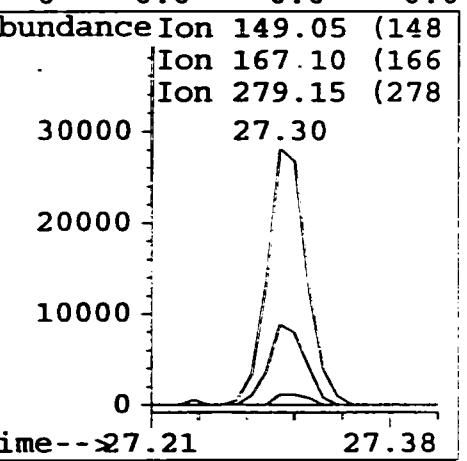
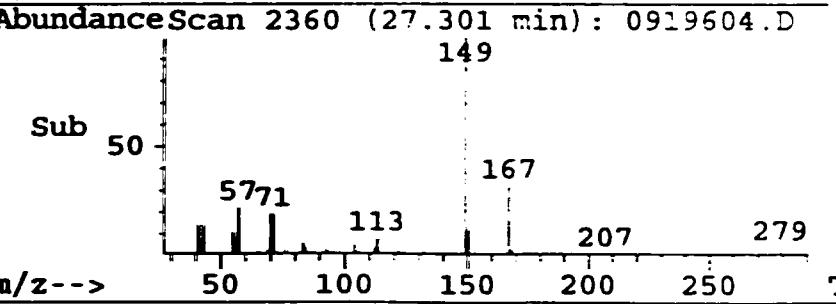
Tgt	Ion:169	Resp:	28829
	Ratio	Lower	Upper
169	100		
168	7.1	65.5	98.2#
167	51.6	26.0	38.9#
0	0.0	0.0	0.0



#70  
bis(2-Ethylhexyl)phthalate  
Concen: 0.82  
RT: 27.30 min Scan# 2360  
Delta R.T. -0.01 min  
Lab File: 0919604.D  
Acq: 19 Sep 97 11:16 am



Tgt	Ion:149.05	Resp:	52657
	Ratio	Lower	Upper
149	100		
167	29.6	25.3	37.9
279	3.4	3.5	5.2#
0	0.0	0.0	0.0



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919604A.D  
 Acq On : 19 Sep 97 11:16 am  
 Sample : SBLK57  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 12:02 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	519925	40.00		0.00
14) Naphthalene-d8	12.86	136	2141826	40.00		-0.01
23) Acenaphthene-d10	17.11	164	1428573	40.00		0.00
35) Phenanthrene-d10	20.63	188	2311660	40.00		-0.02
52) Chrysene-d12	27.06	240	1973474	40.00		0.00
60) Perylene-d12	30.41	264	2061347	40.00		0.00

## System Monitoring Compounds

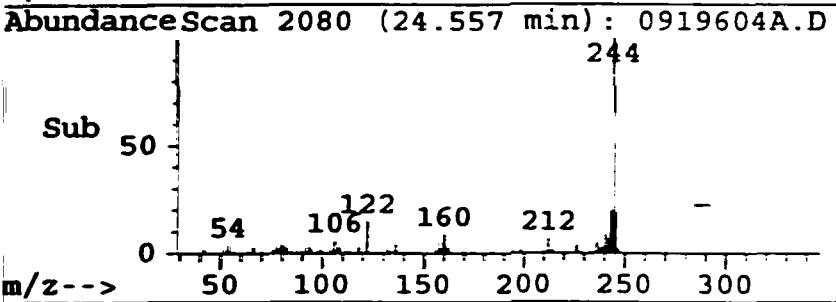
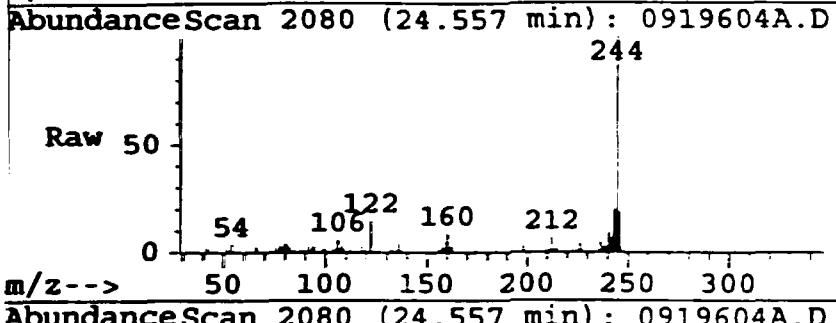
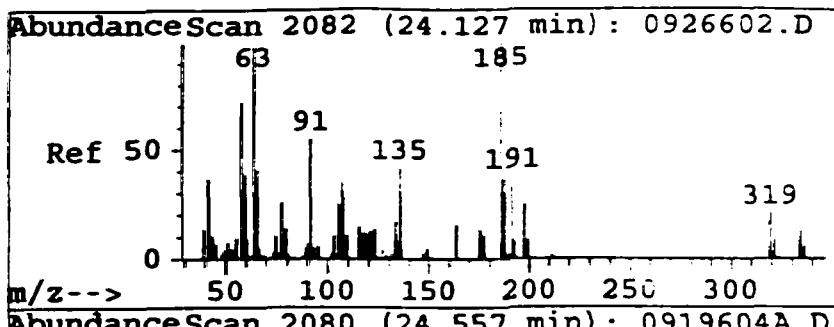
%Recovery

## Target Compounds

Qvalue

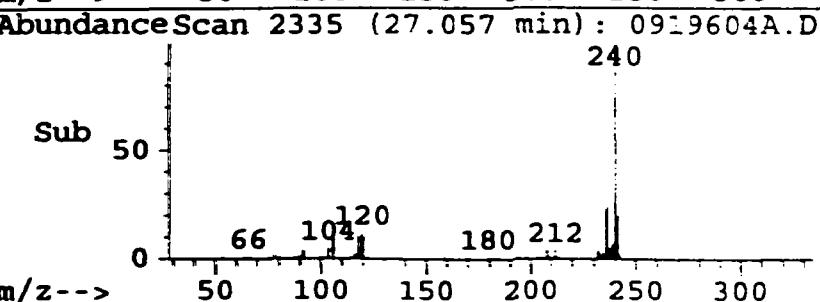
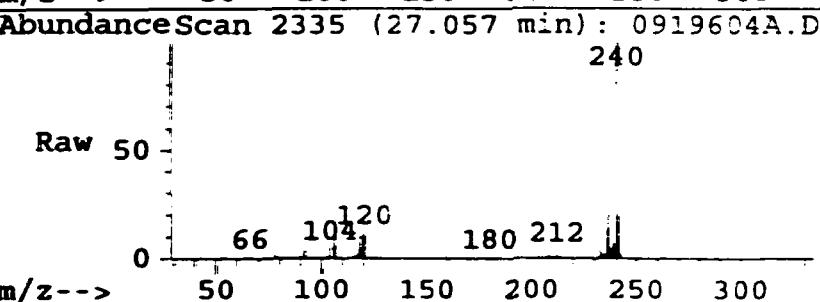
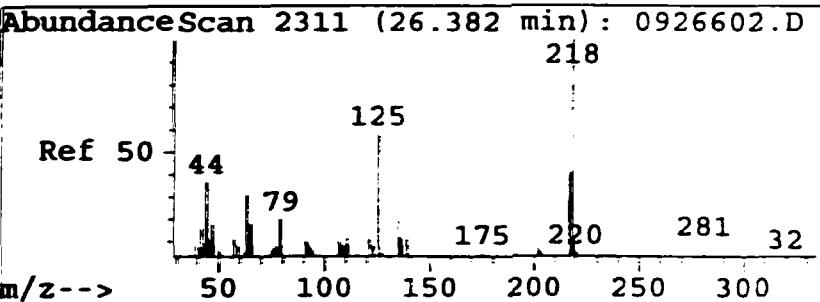
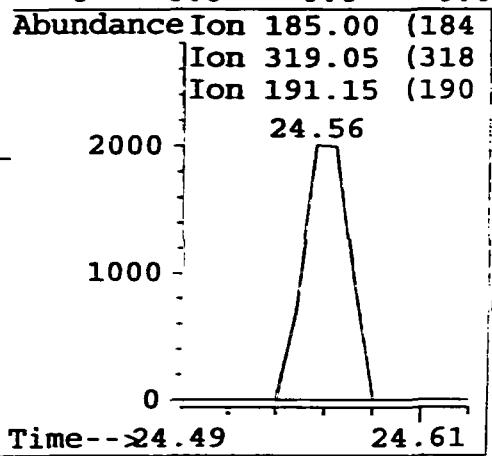
53) Aramite	24.56	185	3317	3.19	#	43
59) Famphur	27.06	218	3596	3.30	#	19

*DR 1/2/98*



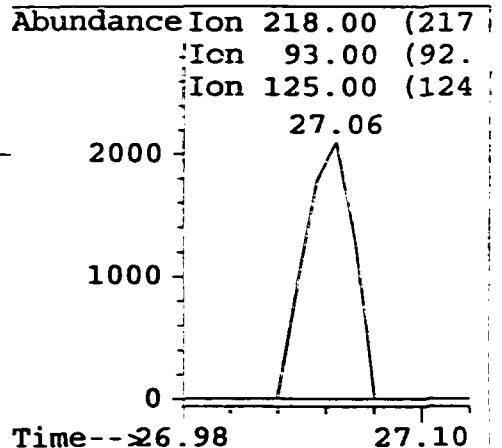
#53  
Aramite  
Concen: 3.19  
RT: 24.56 min Scan# 2080  
Delta R.T. -0.05 min  
Lab File: 0919604A.D  
Acq: 19 Sep 97 11:16 am

Tgt	Ion:185	Resp:	3317
Ion	Ratio	Lower	Upper
185	100		
319	0.0	16.8	25.1#
191	0.0	31.4	47.1#
0	0.0	0.0	0.0



#59  
Famphur  
Concen: 3.30  
RT: 27.06 min Scan# 2335  
Delta R.T. 0.18 min  
Lab File: 0919604A.D  
Acq: 19 Sep 97 11:16 am

Tgt	Ion:218	Resp:	3596
Ion	Ratio	Lower	Upper
218	100		
93	0.0	2.7	4.0#
125	0.0	54.9	82.4#
0	0.0	0.0	0.0



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919604B.D  
 Acq On : 19 Sep 97 11:16 am  
 Sample : SBLK57  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 12:03 1997

Vial: 5  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
 Title :  
 Last Update : Fri Sep 19 11:31:41 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	_
1) 1,4-dichlorobenzene-d4	9.94	152	519925	40.00		0.00	
3) Naphthalene-d8	12.86	136	2141826	40.00		0.00	
5) Acenaphthene-d10	17.11	164	1428573	40.00		0.00	
6) Phenanthrene-d10	20.63	188	2311660	40.00		-0.02	
7) Chrysene-d12	27.06	240	1973474	40.00		0.00	
8) Perylene-d12	30.41	264	2061347	40.00		0.00	

System Monitoring Compounds %Recovery

Target Compounds Qvalue

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO. COMPOUND

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l

Q

108-95-2	Phenol	25	
111-44-4	Bis(2-Chloroethyl) Ether	17	
95-57-8	2-Chlorophenol	29	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-N-Propylamine	20	
67-72-1	Hexachloroethane	14	
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	17	
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	Bis(2-Chloroethoxy) Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	15	
91-20-3	Naphthalene	16	
106-47-8	4-Chloroaniline	4	J
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	31	
91-58-7	2-Choronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SLCS57

Lab Name: IEA-NC

Method: SOW 10/92

SDG No.: 08367

Lab Code: IEA

Case No.: 1364-226

Matrix: (soil/water) WATER

Lab Sample ID: SLCS57

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919605.D

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l Q

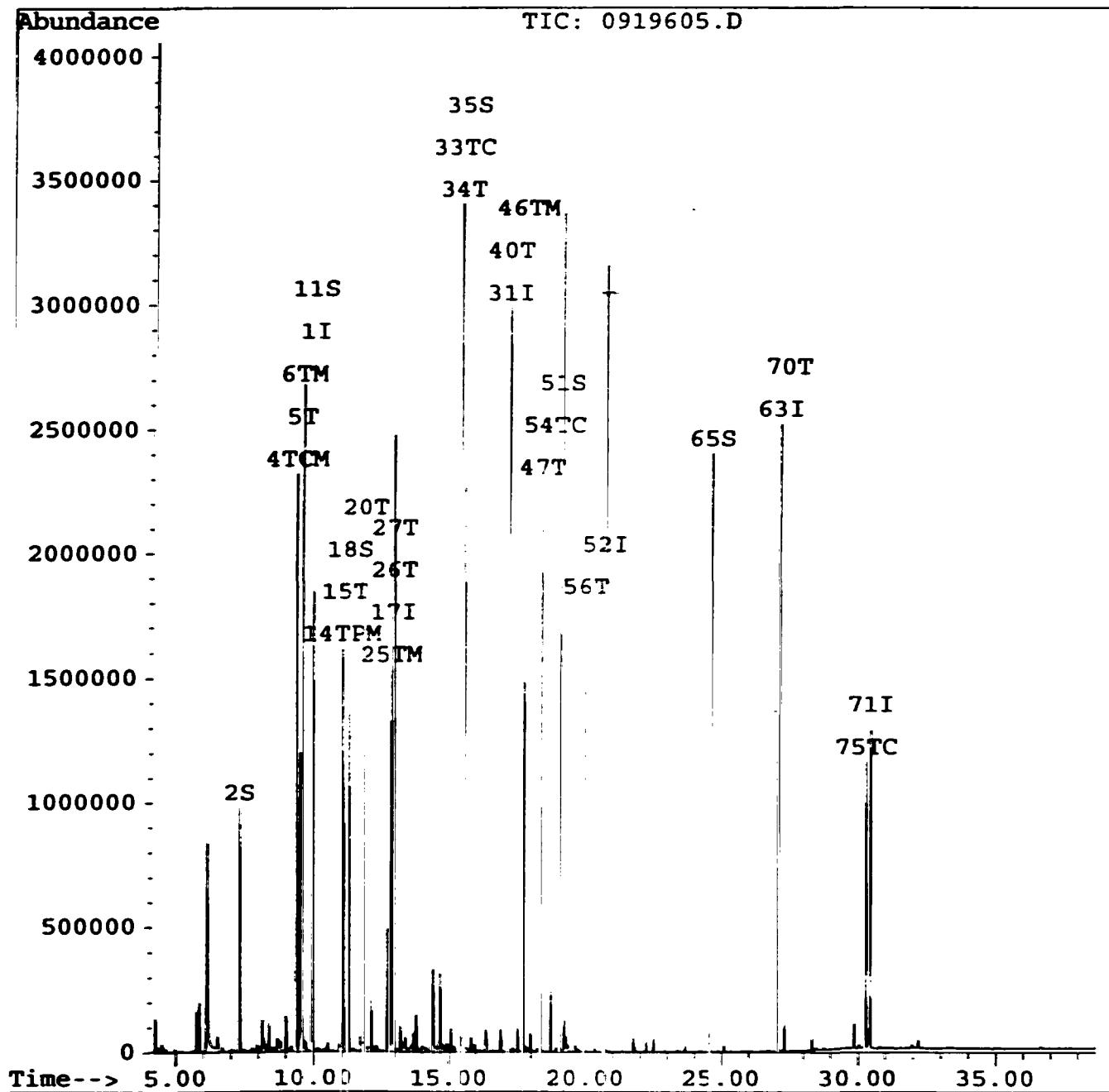
CAS NO.	COMPOUND			
51-28-5	2,4-Dinitrophenol	20	U	
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	14		
84-66-2	Diethylphthalate	14		
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-Methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	2	J	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	15		
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
86-74-8	Carbazole	5	U	
84-74-2	Di-N-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	Bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-N-Octylphthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	27		
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U	
53-70-3	Dibenz(A,H)Anthracene	5	U	
191-24-2	Benzo(G,H,I)Perylene	5	U	

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919605.D  
Acq On : 19 Sep 97 12:03 pm  
Sample : SLCS57  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 12:42 1997

Vial: 6  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919605.D  
 Acq On : 19 Sep 97 12:03 pm  
 Sample : SLCS57  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 12:42 1997

Vial: 6  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

PHENOL-d5 L1%  
 IS#6 TAKS LOW  
 RRIX

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	574592	40.00		0.00
17) Naphthalene-d8	12.87	136	2240056	40.00		0.00
31) Acenaphthene-d10	17.10	164	1382967	40.00		0.00
52) Phenanthrene-d10	20.64	188	2640260	40.00		-0.01
63) Chrysene-d12	27.06	240	2067108	40.00		0.00
71) Perylene-d12	30.41	264	753249	40.00		0.00

## System Monitoring Compounds

				%Recovery
2) 2-Fluorophenol	7.29	112	615128	26.05 65.135%
3) Phenol-d5	9.29	99	19806	0.62 1.549%
7) 2-Chlorophenol-d4	9.55	132	1971	0.09 0.219%
11) 1,2-Dichlorobenzene-d4	9.94	152	574750	39.36 98.403%
18) Nitrobenzene-d5	11.26	82	886615	31.86 79.652%
35) 2-Fluorobiphenyl	15.51	172	1366192	28.57 71.432%
51) 2,4,6-Tribromophenol	19.03	330	847207	92.56 77.131%
65) Terphenyl-d14	24.56	244	1439263	28.12 70.293%

## Target Compounds

				Qvalue
4) Phenol	9.33	94	1543314	50.50 25 # 62
5) Bis(2-Chloroethyl)ether	9.48	93	839284	34.87 17 99
6) 2-Chlorophenol	9.55	128	1375379	58.02 29 97
14) N-Nitroso-di-n-propylamine	11.00	70	741787	39.40 20 99
15) Hexachloroethane	11.08	117	275636	28.45 14 98
20) Isophorone	11.83	82	1941940	34.66 17 99
25) 1,2,4-Trichlorobenzene	12.78	180	592806	30.52 15 99
26) Naphthalene	12.91	128	1898738	32.88 16 99
27) 4-Chloroaniline	12.91	127	227851	7.14 4 # 1
33) 2,4,6-Trichlorophenol	15.32	196	900089	56.46 26 99
34) 2,4,5-Trichlorophenol	15.32	196	900089	62.60 31 97
40) 2,6-Dinitrotoluene	17.10	165	182409	12.95 # 38
46) 2,4-Dinitrotoluene	17.70	165	607057	28.54 14 100
47) Diethylphthalate	18.32	149	1780133	28.14 14 99
54) N-Nitrosodiphenylamine (1)	18.74	169	117264	3.00 2 # 84
56) Hexachlorobenzene	19.92	284	529498	30.04 15 99
70) bis(2-Ethylhexyl)phthalate	27.31	149	68662	1.92 mol # 97
75) Benzo(a)pyrene	30.26	252	1102862	54.75 27 96

9/22/97

(#) = qualifier out of range (m) = manual integration  
 0919605.D CLP691.M Fri Sep 19 12:42:29 1997

MSD6

Page 1

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC                          Method: SOW 10/92  
 Lab Code: IEA                              Case No.: 1364-226                          SDG No.: 08367  
 Matrix: (soil/water) WATER                Lab Sample ID: 970836701MS  
 Sample wt/vol: 1000 (g/mL) mL            Lab File ID: 0919608.D  
 Level: (low/med) LOW                      Date Received: 08/16/97  
 \* Moisture: decanted: (Y/N)              Date Extracted: 08/21/97  
 Concentrated Extract Volume: 1000(uL)    Date Analyzed: 09/19/97  
 Injection Volume: 2.0 (uL)                Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N                      pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
108-95-2	Phenol	29	
111-44-4	Bis(2-Chloroethyl) Ether	17	
95-57-8	2-Chlorophenol	30	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-N-Propylamine	17	
67-72-1	Hexachloroethane	15	
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	16	
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	Bis(2-Chloroethoxy) Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	18	
91-20-3	Naphthalene	18	
106-47-8	4-Chloroaniline	2	J
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	29	
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Choronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg)

ug/l

Q

51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	15	
84-66-2	Diethylphthalate	15	
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-Methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	16	
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	14	
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
86-74-8	Carbazole	5	U
84-74-2	Di-N-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	19	
117-84-0	Di-N-Octylphthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	11	
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U
53-70-3	Dibenz(A,H)Anthracene	5	U
191-24-2	Benzo(G,H,I)Perylene	5	U

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: IEA-NC

Method: 8270

ECC1T1W MS

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) mL

Lab File ID: 0919608A.D

Level: (low/med) LOW

Date Received: 08/16/97

Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
98-86-2	Acetophenone		10	U
930-55-2	N-Nitrosopyrrolidine		40	U
59-89-2	N-Nitrosomorpholine		10	U
108-39-4	3-Methylphenol		10	U
99-65-0	1,3-Dinitrobenzene		20	U
58-90-2	2,3,4,6-Tetrachlorophenol		10	U
122-39-4	Diphenylamine		10	U
23950-58-5	Pronamide		10	U
465-73-6	Isodrin		20	U
140-57-8	Aramite		50	U
510-15-6	Chlorobenzilate		10	U
53-96-3	2-Acetylaminofluorene		20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MS

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MS

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919608B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/l

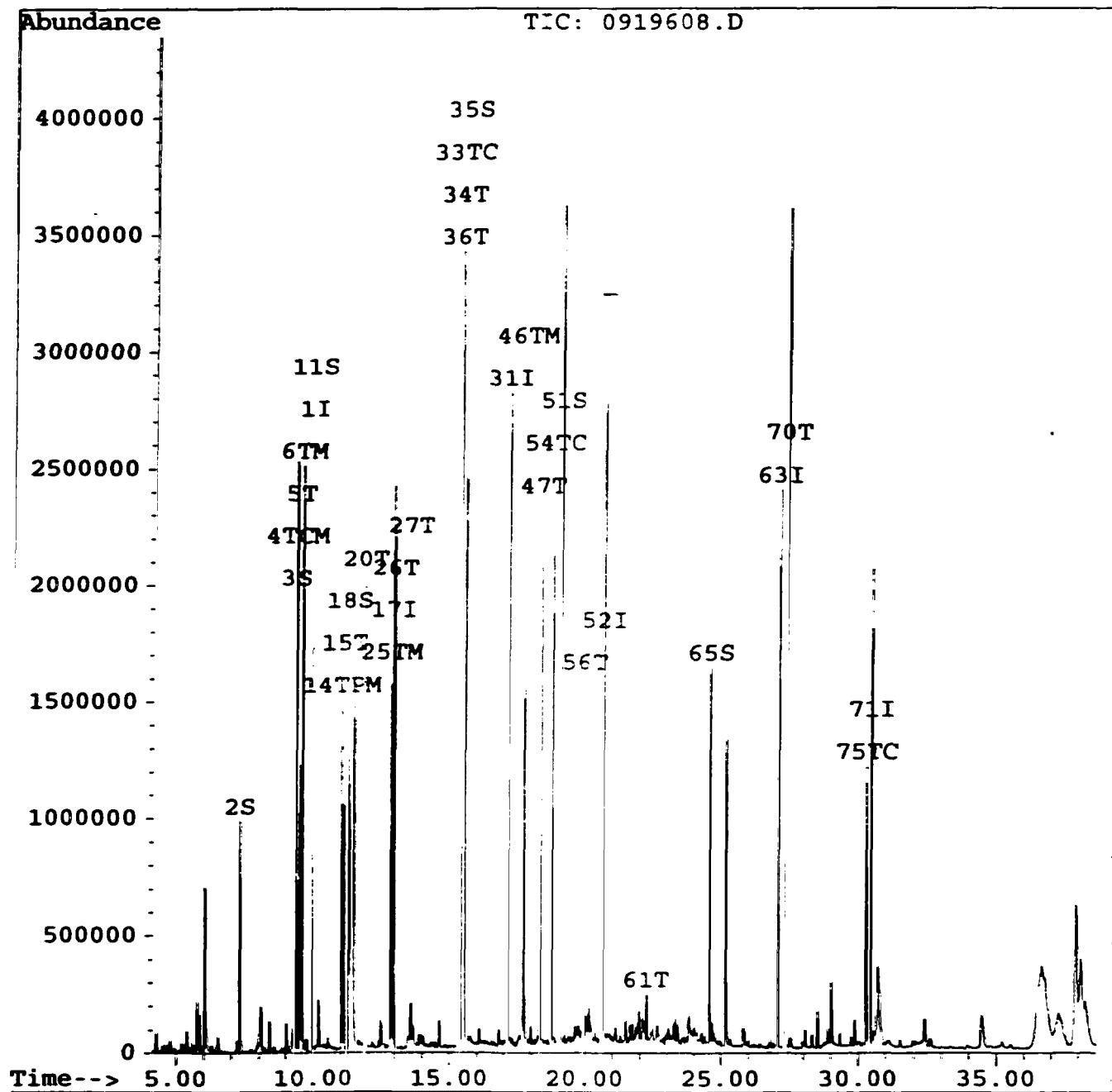
Q

CAS NO.	COMPOUND			
100-51-6	Benzyl Alcohol		20	U
65-85-0	Benzoic Acid		50	U

Data File : C:\HPCHEM\1\DATA\9709196.B\0919608.D  
Acq On : 19 Sep 97 2:24 pm  
Sample : 970836701MS  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 15:03 1997

Vial: 9  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919608.D  
 Acq On : 19 Sep 97 2:24 pm  
 Sample : 970836701MS  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 15:03 1997

Vial: 9  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.95	152	569467	40.00		0.01
17) Naphthalene-d8	12.87	136	2135854	40.00		0.00
31) Acenaphthene-d10	17.11	164	1396954	40.00		0.00
52) Phenanthrene-d10	20.63	188	2349113	40.00		-0.01
63) Chrysene-d12	27.06	240	1880072	40.00		0.00
71) Perylene-d12	30.43	264	1968407	40.00		0.00

System Monitoring Compounds				%Recovery
2) 2-Fluorophenol	7.30	112	642300	27.45
3) Phenol-d5	9.31	99	973300	30.71
7) 2-Chlorophenol-d4	9.56	132	1086	<del>0.05</del>
11) 1,2-Dichlorobenzene-d4	9.95	152	569467	<del>39.35</del>
18) Nitrobenzene-d5	11.26	82	860724	32.44
35) 2-Fluorobiphenyl	15.52	172	1470753	30.45
51) 2,4,6-Tribromophenol	19.04	330	908465	98.26
65) Terphenyl-d14	24.57	244	977674	21.00

Target Compounds				Qvalue
4) Phenol	9.34	94	1757764	58.04 29
5) Bis(2-Chloroethyl)ether	9.48	93	792489	33.22 17
6) 2-Chlorophenol	9.56	128	1404427	59.77 30
14) N-Nitroso-di-n-propylamine	11.00	70	631156	33.83 17
15) Hexachloroethane	11.08	117	297550	30.99 15
20) Isophorone	11.84	82	1770049	33.14 16
25) 1,2,4-Trichlorobenzene	12.78	180	649886	35.09 18
26) Naphthalene	12.92	128	1969711	35.78 18
27) 4-Chloroaniline	13.48	127	125046	4.11 2
33) 2,4,6-Trichlorophenol	15.33	196	941465	58.47 29
34) 2,4,5-Trichlorophenol	15.33	196	941465	<del>64.82</del>
36) 2-Chloronaphthalene	15.33	162	85258	<del>1.91</del>
46) 2,4-Dinitrotoluene	17.71	165	641326	29.85 15
47) Diethylphthalate	18.33	149	1900962	29.75 15
54) N-Nitrosodiphenylamine (1)	18.74	169	1100595	31.66 16
56) Hexachlorobenzene	19.92	284	434076	27.68 14
61) Di-n-butylphthalate	22.26	149	100648	<del>1.11</del>
70) bis(2-Ethylhexyl)phthalate	27.31	149	2382392	38.85 19
75) Benzo(a)pyrene	30.26	252	1131479	21.50 11

19/2/97

Data File : c:\hpchem\1\data\9709196.b\0919608a.d  
Acq On : 19 Sep 97 2:24 pm  
Sample : 970836701MS  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 22 10:55 1997

Vial: 9  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
Title :  
Last Update : Fri Sep 19 11:51:21 1997  
Response via : Continuing Calibration

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev (Min)
1)	1,4-dichlorobenzene-d4	9.95	152	569467	40.00		0.00
14)	Naphthalene-d8	12.87	136	2135854	40.00		0.00
23)	Acenaphthene-d10	17.11	164	1396954	40.00		0.00
35)	Phenanthrene-d10	20.63	188	2349113	40.00		-0.01
52)	Chrysene-d12	27.06	240	1880072	40.00		0.00
60)	Perylene-d12	30.43	264	1968407	40.00		0.01

#### System Monitoring Compounds

\*Recovery

#### Target Compounds

					Qval	
8)	Aniline	9.34	93	32703	0.88	#
11)	N-Nitrosomorpholine	11.00	56	40252	3.32	# 34
20)	1,4-Phenylenediamine	13.56	108	38018	5.25	# 45
32)	2,3,4,6-Tetrachlorophenol	17.98	232	19493	1.75	98
34)	Diphenylamine	18.74	169	1100595	18.12	99
53)	Aramite	24.56	185	3391	2.43	# 52
59)	Famphur	27.07	218	3848	3.70	# 49

✓ 9/25/97

## Quantitation Report

Data File : c:\hpchem\1\data\9709196.b\0919608b.d  
 Acq On : 19 Sep 97 2:24 pm  
 Sample : 970836701MS  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 22 10:57 1997

Vial: 9  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
 Title :  
 Last Update : Fri Sep 19 11:31:41 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.95	152	569467	40.00		0.01
3) Naphthalene-d8	12.87	136	2135854	40.00		0.00
5) Acenaphthene-d10	17.11	164	1396954	40.00		0.00
6) Phenanthrene-d10	20.63	188	2349113	40.00		-0.01
7) Chrysene-d12	27.06	240	1880072	40.00		0.00
8) Perylene-d12	30.43	264	1968407	40.00		0.00

## System Monitoring Compounds %Recovery

Target Compounds	QValue
4) Benzoic acid	91

2 hr 9/25/97

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609.D

Level: (low/med) LOW

Date Received: 08/16/97

‡ Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
108-95-2	Phenol	6	
111-44-4	Bis(2-Chloroethyl) Ether	15	
95-57-8	2-Chlorophenol	14	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	1	J
621-64-7	N-Nitroso-Di-N-Propylamine	12	
67-72-1	Hexachloroethane	13	
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	17	
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	Bis(2-Chloroethoxy) Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	15	
91-20-3	Naphthalene	16	
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	93	E
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	2	J
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1C  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
---------	----------	---	------	---

51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	54	
84-66-2	Diethylphthalate	33	
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-Methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	11	
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
86-74-8	Carbazole	5	U
84-74-2	Di-N-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	12	
117-84-0	Di-N-Octylphthalate	15	
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	340	E
193-39-5	Indeno(1,2,3-Cd)Pyrene	5	U
53-70-3	Dibenz(A,H)Anthracene	5	U
191-24-2	Benzo(G,H,I)Perylene	5	U

1B  
SW-846 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC      Method: 8270  
Lab Code: IEA      Case No.: 1364-226      SDG No.: 08367  
Matrix: (soil/water) WATER      Lab Sample ID: 970836701MSD  
Sample wt/vol: 1000 (g/mL) ml      Lab File ID: 0919609A.D  
Level: (low/med) LOW      Date Received: 08/16/97  
† Moisture: decanted: (Y/N)      Date Extracted: 08/21/97  
Concentrated Extract Volume: 1000(uL)      Date Analyzed: 09/19/97  
Injection Volume: 2.0 (uL)      Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N      pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/l
98-86-2	Acetophenone	10	U
930-55-2	N-Nitrosopyrrolidine	40	U
59-89-2	N-Nitrosomorpholine	10	U
108-39-4	3-Methylphenol	10	U
99-65-0	1,3-Dinitrobenzene	20	U
58-90-2	2,3,4,6-Tetrachlorophenol	10	U
122-39-4	Diphenylamine	10	U
23950-58-5	Pronamide	10	U
465-73-6	Isodrin	20	U
140-57-8	Aramite	50	U
510-15-6	Chlorobenzilate	10	U
53-96-3	2-Acetylaminofluorene	20	U

1B  
LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W MSD

Lab Name: IEA-NC

Method: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

Matrix: (soil/water) WATER

Lab Sample ID: 970836701MSD

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: 0919609B.D

Level: (low/med) LOW

Date Received: 08/16/97

% Moisture: decanted: (Y/N)

Date Extracted: 08/21/97

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/19/97

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

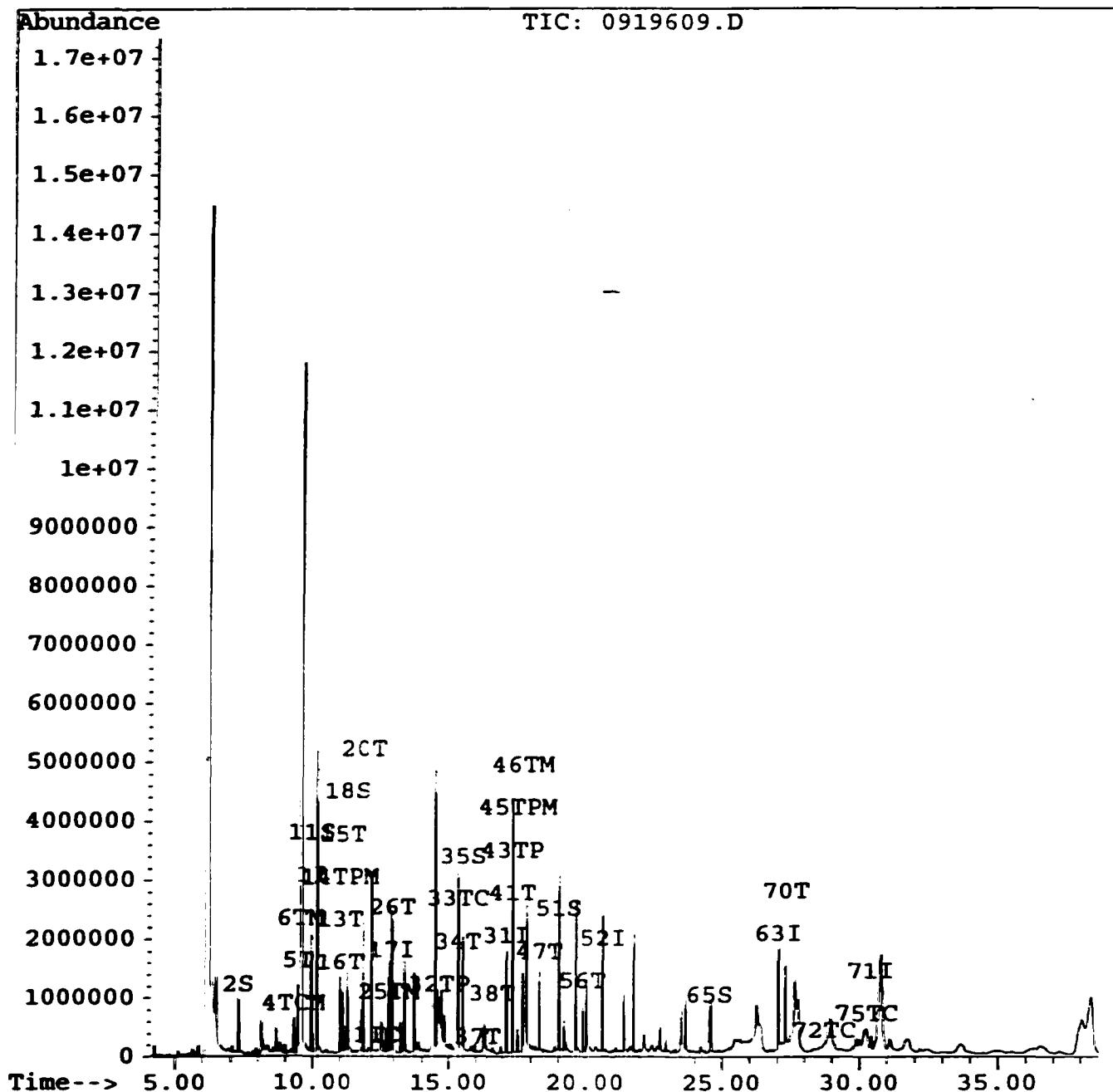
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/l	Q
100-51-6	Benzyl Alcohol		20	U
65-85-0	Benzoic Acid		50	U

## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919609.D  
Acq On : 19 Sep 97 3:12 pm  
Sample : 970836701MSD  
Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
Quant Time: Sep 19 15:51 1997

Vial: 10  
Operator: VAN LARE  
Inst : MSD6  
Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
Title :  
Last Update : Fri Sep 19 09:55:08 1997  
Response via : Single Level Calibration



## Quantitation Report

Data File : C:\HPCHEM\1\DATA\9709196.B\0919609.D  
 Acq On : 19 Sep 97 3:12 pm  
 Sample : 970836701MSD  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 19 15:51 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

IS#3,6 FAIL LOW  
 PHENOLd5<10%

Method : C:\HPCHEM\1\DATA\9709196.B\CLP691.M  
 Title :  
 Last Update : Fri Sep 19 09:55:08 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-d4	9.94	152	613968	40.00		0.00
17) Naphthalene-d8	12.88	136	2236589	40.00		0.00
31) Acenaphthene-d10	17.10	164	349982	40.00		0.00
52) Phenanthrene-d10	20.64	188	1931733	40.00		-0.01
63) Chrysene-d12	27.06	240	1012332	40.00		0.00
71) Perylene-d12	30.41	264	2905	40.00		-0.02

System Monitoring Compounds				%Recovery
2) 2-Fluorophenol	7.29	112	556978	22.08
3) Phenol-d5	9.30	99	2883	0.08
7) 2-Chlorophenol-d4	9.54	132	7290	0.30
11) 1,2-Dichlorobenzene-d4	9.94	152	614174	39.36
18) Nitrobenzene-d5	11.26	82	873384	31.43
35) 2-Fluorobiphenyl	15.51	172	1228353	101.52
51) 2,4,6-Tribromophenol	19.03	330	723143	312.19
65) Terphenyl-d14	24.56	244	398825	15.91

Target Compounds				Qvalue
4) Phenol	9.33	94	373382	11.43 6
5) Bis(2-Chloroethyl)ether	9.48	93	783067	30.45 15
6) 2-Chlorophenol	9.55	128	721165	28.47 14
13) 2-Methylphenol	10.99	108	48786	2.09 1
14) N-Nitroso-di-n-propylamine	10.99	70	503741	25.04 12
15) Hexachloroethane	11.08	117	275075	26.57 13
16) 4-Methylphenol	10.99	108	48786	2.03 1
20) Isophorone	11.84	82	1878891	33.59 17
21) 2-Nitrophenol	12.05	139	15572	3.03 15
25) 1,2,4-Trichlorobenzene	12.79	180	575713	29.68
26) Naphthalene	12.92	128	1884367	32.69 14
32) Hexachlorocyclopentadiene	14.65	237	3037	0.84
33) 2,4,6-Trichlorophenol	15.33	196	749057	185.68 93
34) 2,4,5-Trichlorophenol	15.33	196	749057	205.86
37) 2-Nitroaniline	16.09	65	3096	0.87
38) Dimethylphthalate	16.62	163	72470	5.02 2
41) 3-Nitroaniline	17.34	138	4580	1.20
43) 2,4-Dinitrophenol	17.34	184	13774	5.14
45) 4-Nitrophenol	17.54	109	4504	2.13
46) 2,4-Dinitrotoluene	17.71	165	577275	107.24 54
47) Diethylphthalate	18.32	149	1055611	65.94 33
56) Hexachlorobenzene	19.92	284	275985	21.40 11
70) bis(2-Ethylhexyl)phthalate	27.31	149	815582	24.70 12
72) Di-n-octylphthalate	28.72	149	4566	29.74 15
75) Benzo(a)pyrene	30.25	252	52924	681.27 340

1/2/97

(#) = qualifier out of range (m) = manual integration  
 0919609.D CLP691.M Fri Sep 19 15:51:16 1997

MSD6

Page 1

## Quantitation Report

Data File : c:\hpcchem\1\data\9709196.b\0919609a.d  
 Acq On : 19 Sep 97 3:12 pm  
 Sample : 970836701MSD  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 22 10:56 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\IEAAPDX2.M  
 Title :  
 Last Update : Fri Sep 19 11:51:21 1997  
 Response via : Continuing Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-d4	9.94	152	613968	40.00		0.00
14) Naphthalene-d8	12.88	136	2236589	40.00		0.00
23) Acenaphthene-d10	17.10	164	349982	40.00		0.00
35) Phenanthrene-d10	20.64	188	1931733	40.00		-0.01
52) Chrysene-d12	27.06	240	1012332	40.00		0.00
60) Perylene-d12	30.41	264	2905	40.00		0.00

## System Monitoring Compounds

%Recovery

## Target Compounds

Target Compounds	R.T.	QIon	Response	%Recovery	Qual
7) Pentachloroethane	9.56	167	17148	1.99	# 1
11) N-Nitrosomorpholine	10.99	56	28967	2.21	# 35
13) 3-Methylphenol	10.99	108	48786	2.41	88
30) 1-Naphthylamine	17.85	143	101474	9.65	# 1
32) 2,3,4,6-Tetrachlorophenol	17.99	232	14116	4.99	# 85
37) 1,3,5-Trinitrobenzene	19.67	213	15256	3.69	# 1
42) Dimethoate	20.06	229	4433	2.83	# 1
46) Disulfoton	20.76	274	4997	7.02	# 1
53) Aramite	24.61	185	3136	5.88	# 1
57) Kepone	25.75	272	1682	3.59	# 40
59) Famphur	27.07	218	1656	2.96	# 44
61) 7,12-Dimethylbenz[a]anthra	29.36	256	304	7.15	# 27
62) Hexachlorophene	30.02	196	1421	1403.69	# 30
63) 3-Methylcholanthrene	31.66	268	979	19.62	# 41

29/25/97

## Quantitation Report

Data File : c:\hpchem\1\data\9709196.b\0919609b.d  
 Acq On : 19 Sep 97 3:12 pm  
 Sample : 970836701MSD  
 Misc : WATER LOW 1X SBLK57\_082197 IEA MSD6  
 Quant Time: Sep 22 10:58 1997

Vial: 10  
 Operator: VAN LARE  
 Inst : MSD6  
 Multiplr: 1.00

Method : C:\HPCHEM\1\DATA\9709196.B\MIDCO.M  
 Title :  
 Last Update : Fri Sep 19 11:31:41 1997  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-d4	9.94	152	613968	40.00		0.00
3) Naphthalene-d8	12.88	136	2236589	40.00		0.00
5) Acenaphthene-d10	17.10	164	349982	40.00		0.00
6) Phenanthrene-d10	20.64	188	1931733	40.00		-0.01
7) Chrysene-d12	27.06	240	1012332	40.00		0.00
8) Perylene-d12	30.41	264	2905	40.00		-0.02

System Monitoring Compounds %Recovery

Target Compounds Qvalue

24/25/97

2LCC  
LOW CONC. WATER PESTICIDE SURROGATE RECOVERY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA

Case No.: 1364-226

SDG No.: 08367

GC Column(1): RTX-35

ID: 0.53 (mm)

GC Column(2): DB-1701

ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	88	52*	99	65			1
02	ECC1T1W	58*	139	84	61			1
03	ECC1T1WMS	98	126	81	56*			1
04	ECC1T1WMSD	86	130	82	58*			1
05	ECC1T1WD	68	126	70	52*			1
06	PLCS01	90	52*	96	50*			2
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY  
QC LIMITS

TCX = Tetrachloro-m-xylene (60-150)  
DCB = Decachlorobiphenyl (60-150)

# Column to be used to flag recovery values  
\* Values outside of QC limits  
D Surrogate diluted out

3E  
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: INDUSTRIAL &amp; ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Matrix Spike - Client Sample No.: ECC1T1W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	0.10	0.0	0.046	46*	56-123
Heptachlor epoxide	0.10	0.0	0.058	58*	74-150
Dieldrin	0.20	0.0	0.12	60	33-133
4,4'-DDE	0.20	0.0	0.020	10*	50-150
Endrin	0.20	0.0	0.15	75	56-121
Endosulfan sulfate	0.20	0.0	0.0	0*	50-100
gamma-Chlordane	0.10	0.0	0.062	62	33-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	MSD % RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.10	0.049	49*	6	40	56-123
Heptachlor epoxide	0.10	0.064	64*	10	40	74-150
Dieldrin	0.20	0.13	65	8	40	33-133
4,4'-DDE	0.20	0.0	0*	200*	40	50-150
Endrin	0.20	0.15	75	0	40	56-121
Endosulfan sulfate	0.20	0.0	0*	0	40	50-100
gamma-Chlordane	0.10	0.068	68	9	40	33-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 1 out of 7 outside limits

Spike Recovery: 8 out of 14 outside limits

COMMENTS: \_\_\_\_\_

3LCC  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

PLCS01

Lab Code: IEA Case No.: 1364-226

SDG No.: 080367

Lab Sample ID: PLCS01

LCS Lot No.: POC-96-062

LCS Aliquot: 1000 (uL)

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

Instrument ID(1): HP5890P3

GC Column(1):RTX-35

ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	100	23	23*	56-123
Heptachlor Epoxide	100	39	39*	74-150
Dieldrin	200	86	43	33-130
4,4'-DDE	200	90	45*	50-150
Endrin	200	93	46*	56-121
Endosulfan sulfate	200	14	7*	50-100
gamma-Chlordane	100	42	42	33-130

Instrument ID(2): HP5890P2

GC Column(2):DB-1701

ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	100	15	15*	56-123
Heptachlor Epoxide	100	29	29*	74-150
Dieldrin	200	61	30*	33-130
4,4'-DDE	200	66	33*	50-150
Endrin	200	66	33*	56-121
Endosulfan sulfate	200	10	5*	50-100
gamma-Chlordane	100	29	29*	33-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

LCS Recovery: 12 out of 14 outside limits

COMMENTS: \_\_\_\_\_

4LCC  
LOW CONC. WATER PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLK01

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Date Extracted: 08/21/97

Lab Sample ID: PBLK01

Date Analyzed (1): 09/08/97

Date Analyzed (2): 09/19/97

Time Analyzed (1): 1535

Time Analyzed (2): 2200

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column (1): RTX-35 ID: 0.53(mm) GC Column (2): DB-1701 ID: 0.53(mm)

Sulfur Cleanup: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ECC1T1W	970836701	09/08/97	09/19/97
02	ECC1T1WD	970836702	09/08/97	09/20/97
03	ECC1T1WMS	970836701MS	09/08/97	09/19/97
04	ECC1T1WMSD	970836701MSD	09/08/97	09/20/97
05	PLCS01	PLCS01	09/08/97	09/20/97
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: \_\_\_\_\_

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: INDUSTRIAL &amp; ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836702

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.5	P
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : 970836702 Report No : 7.010  
 Result File : /RESULT/P3082897\_097.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : External STD  
 Run Time : 46.00 Mins. Injected on 1918 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 86 Bottle no. : 85

\* Dil-Fact

~~100.00~~ 20.00  
~~XX 94%~~

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	5.39		.087	12134	PV	0.00000	
2	5.83		.125	4910	VV	0.00000	
3	6.11		.123	6256	PV	0.00000	
4	6.36		.123	6591	VV	0.00000	
5	6.60		.076	55884	VV	0.00000	
6	6.85		.076	3597	VV	0.00000	
7	7.30		.095	45059	BV	0.00000	
8	7.52		.071	7846	PV	0.00000	
9	7.65		.102	60401	VB	0.00000	
10	8.46		.103	5562	VV	0.00000	
11	8.77		.139	10546	VV	0.00000	
12	9.05		.108	101516	VV	0.00000	
13	9.33		.161	14022	VV	0.00000	
14	9.65		.176	39333	VV	0.00000	
15	9.86		.115	9836	VV	0.00000	
16	10.21		.155	14685	PV	0.00000	
17	10.32		.108	5413	VV	0.00000	
18	10.47		.127	5166	VV	0.00000	
19	10.54		.102	5287	VV	0.00000	
20	10.90		.131	7810	VV	0.00000	
21	11.42		.112	110674	VV	0.00000	
22	11.77		.144	40419	VV	0.00000	
23	12.02 #12.31		.137	58198	VV	0.02626	Tetrachloro-m-xylene
24	12.30		.176	26534	VV	0.00000	
25	12.59		.156	16466	VV	0.00000	
26	12.97		.163	34419	VV	0.00000	
27	13.21		.165	27329	VV	0.00000	
28	13.46		.175	40038	VV	0.00000	
29	13.66		.130	20366	VV	0.00000	
30	13.81		.120	11239	VV	0.00000	
31	14.07		.161	39964	VV	0.00000	
32	14.19		.111	176956	VV	0.00000	
33	14.39		.092	18917	VV	0.00000	
34	14.51		.128	44140	VV	0.00000	
35	14.71		.190	23081	VV	0.00000	
36	15.02		.201	33957	VV	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
37	15.66		.259	27328	VV	0.00000	
38	15.98		.201	18002	VV	0.00000	
39	16.30		.165	51656	VV	0.00000	
40	16.57		.228	52277	VV	0.00000	
41	16.89		.130	96710	VV	0.00000	
42	17.06		.109	126327	VV	0.00000	
43	17.32		.152	24095	VV	0.00000	
44	17.46		.119	22656	VV	0.00000	
45	17.69	17.66	.162	62932	VV	.20421	<del>beta-BHC</del> NC
46	17.91		.126	55881	VV	0.00000	
47	18.09		.116	67052	VV	0.00000	
48	18.29		.133	52306	VV	0.00000	
49	18.45		.086	16565	VV	0.00000	
50	18.55		.126	27686	VV	0.00000	
51	18.73		.127	57970	VV	0.00000	
52	18.88		.200	62397	VV	0.00000	
53	19.16	19.16	.161	43785	VV	.08034	<del>Heptachlor</del> NC
54	19.47		.232	68620	VV	0.00000	
55	19.69		.200	205964	VV	0.00000	
56	19.98		.127	93673	VV	0.00000	
57	20.12		.101	31594	VV	0.00000	
58	20.34		.166	32761	VV	0.00000	
59	20.46		.128	30449	VV	0.00000	
60	20.67	20.72	.125	72415	VV	.16365	<del>Aldrin</del> NC
61	20.78		.183	88742	VV	0.00000	
62	21.12		.126	65232	VV	0.00000	
63	21.28		.150	59533	VV	0.00000	
64	21.44		.155	36150	VV	0.00000	
65	21.91		.159	51844	VV	0.00000	
66	22.04		.110	37453	VV	0.00000	
67	22.16		.109	47101	VV	0.00000	
68	22.32		.166	48527	VV	0.00000	
69	22.54		.125	68042	VV	0.00000	
70	22.68		.129	86118	VV	0.00000	
71	22.96		.166	143728	VV	0.00000	
72	23.08	23.14	.107	117024	VV	.24548	<del>heptachlor epoxide</del> NC
73	23.66		.167	153403	VV	0.00000	
74	23.93	23.92	.141	83832	VV	.18199	<del>gamma-Chlordane</del> NC
75	24.23		.227	130418	VV	0.00000	
76	24.40		.102	31888	VV	0.00000	
77	24.53	24.52	.159	68601	VV	.16045	<del>alpha-Chlordane</del> NC
78	24.68		.108	45262	VV	0.00000	
79	24.89		.151	55447	VV	0.00000	
80	24.98		.105	44790	VV	0.00000	
81	25.11		.118	57394	VV	0.00000	
82	25.39	25.40	.177	260310	VV	.73109	<del>4,4'-DDE</del> NC
83	25.54		.081	43502	VV	0.00000	
84	25.65	25.70	.138	113714	VV	.30074	<del>Dieldrin</del> NC
85	25.87		.112	85721	VV	0.00000	
86	25.96		.085	52274	VV	0.00000	
87	26.08		.104	63457	VV	0.00000	
88	26.23		.150	77078	VV	0.00000	

9/26/91  
M.

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
PK 89	26.45		.146	78532	VV	0.00000	
90	26.57		.151	95812	VJ	0.00000	
91	26.79		.161	116363	VV	0.00000	
92	26.93	26.92	.171	94342	VV	.31730	Endrin
93	27.16		.181	118794	VV	0.00000	
94	27.29	27.34	.094	43340	VV	.15732	4,4'-DDD
95	27.52	27.55	.191	128079	VV	.38807	Endosulfan II
96	27.69		.150	80860	VV	0.00000	
97	27.85		.089	45393	VV	0.00000	
98	27.96		.138	96158	VV	0.00000	
99	28.17		.161	88345	VV	0.00000	
100	28.32		.194	112762	VV	0.00000	
101	28.58	28.58	.119	52264	VJ	.18246	Endrin aldehyde
102	28.72		.163	97775	VV	0.00000	
103	28.90		.201	123123	VV	0.00000	
104	29.16	29.11	.228	152535	VV	.52086	Endosulfan sulfate
105	29.49		.213	109230	VV	0.00000	
106	29.67		.182	70948	VV	0.00000	
107	29.95		.231	170570	VV	0.00000	
108	30.34		.146	56152	VV	0.00000	
109	30.58		.183	61090	VV	0.00000	
110	30.71		.120	44052	VV	0.00000	
111	30.87		.210	89368	VV	0.00000	
112	31.30	31.32	.165	40588	VV	.28467	
113	31.46		.323	77650	VV	0.00000	
114	32.50		.284	41030	VV	0.00000	
115	33.27		.239	65683	VV	0.00000	
116	33.69		.281	32745	VV	0.00000	
117	34.21		.232	45316	VV	0.00000	
118	35.65		.222	12742	BV	0.00000	
119	36.11		.230	31324	VV	0.00000	
120	40.03	#40.03	.224	50721	BV	.92799	Decachlorobiphenyl

Total Area : 7295260 Total PPB : 4.194

Report Time : 2125 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_097.RES

9/20/97  
 HJ

IEA Pesticide Standard Report

Sample Name : 970836702 Inj on 1918 08Sep1997  
Result File : /RESULT/P3082897\_097.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul

5.5386  
5.68272  
5.83523  
6.01712  
6.602  
7.5227298  
7.5227540  
8.452  
8.472  
9.052  
9.22645  
10.900  
11.418  
12.019  
14.066  
14.187  
15.018  
15.658  
16.591  
16.886  
17.056  
18.86  
18.886  
19.525  
19.986  
20.483  
20.7573  
21.320  
22.242  
22.242676963.078  
23.659  
25.393  
31.498  
32.496  
33.272  
34.205  
35.646  
35.712  
  
40.032

*breakline*

**IEA Pesticide Standard Report**

Sample Name : 970836702 Report No : 103.00  
 Result File : /RESULT/P2091297\_029.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0135 20Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 17 Bottle no. : 17

**x Dil-Fact**

~~100.00-20.00~~  
~~50.00~~

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.14		.052	3908	PU	0.00000	
2	3.37		.107	8413	UU	0.00000	
3	3.68		.092	10001	PU	0.00000	
4	3.81		.095	16128	UU	0.00000	
5	3.99		.051	2827	UU	0.00000	
6	4.07		.094	10183	UU	0.00000	
7	4.27		.108	7416	UU	0.00000	
8	4.50		.069	15893	UU	0.00000	
9	4.80		.060	72074	UU	0.00000	
10	4.99		.069	4422	UU	0.00000	
11	5.13		.114	8013	UU	0.00000	
:	5.25		.088	7372	UU	0.00000	
13	5.35		.066	3036	UU	0.00000	
14	5.49		.062	3855	UU	0.00000	
15	5.60		.095	3204	UU	0.00000	
16	5.71		.067	3011	UU	0.00000	
17	5.89		.085	3485	UU	0.00000	
18	6.01		.075	17266	UU	0.00000	
19	6.20		.090	46654	UU	0.00000	
20	6.43		.068	81485	UU	0.00000	
21	6.55		.107	7647	UU	0.00000	
22	6.79		.168	18633	UU	0.00000	
23	6.94		.081	6122	UU	0.00000	
24	7.08		.100	4461	UU	0.00000	
25	7.26		.081	4382	PU	0.00000	
26	7.46		.118	29337	UU	0.00000	
27	7.71	7.73	.078	209734	UU	.05930	<del>.25147</del>
28	7.78		.095	151205	UU	0.00000	Tetrachloro-m-xylene
29	8.49		.119	19314	UU	<del>0.00000</del>	
30	8.69		.086	26386	UU	0.00000	
31	8.90		.142	50603	UU	0.00000	
32	9.22		.222	18531	UU	0.00000	
33	9.59		.092	66632	UU	0.00000	
34	9.91		.142	292378	UU	0.00000	
35	10.12		.154	61159	UU	0.00000	
36	10.33		.107	16727	UU	0.00000	
?	10.45		.108	13531	UU	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	10.63		.125	21163	VV	0.00000	
79	10.71		.083	12316	VV	0.00000	
0	10.96		.125	23516	VV	0.00000	
41	11.08	11.06	.110	10840	VV	.01643	
42	11.25		.126	20020	VV	0.00000	
43	11.41		.107	41277	VV	0.00000	
44	11.65		.196	70144	VV	0.00000	
45	11.85		.098	129463	VV	0.00000	
46	12.02		.100	288734	VV	0.00000	
47	12.30		.149	22203	VV	0.00000	
48	12.49		.125	27501	VV	0.00000	
49	12.65	12.70	.139	83787	VV	.11810	
50	12.88		.125	37676	VV	0.00000	
51	13.08		.133	92905	VV	0.00000	
52	13.26		.118	44967	VV	0.00000	
53	13.44		.143	134913	VV	0.00000	
54	13.90		.161	180065	VV	0.00000	
55	14.05		.110	54486	VV	0.00000	
56	14.35		.201	29484	VV	0.00000	
57	14.46		.091	12305	VV	0.00000	
58	14.86		.244	230244	VV	0.00000	
59	15.05		.138	74825	VV	0.00000	
60	15.22		.135	66262	VV	0.00000	
61	15.45		.157	160264	VV	0.00000	
62	15.74		.205	152437	VV	0.00000	
63	16.06		.192	50081	VV	0.00000	
64	16.54		.228	24042	VV	0.00000	
65	16.97		.240	184408	VV	0.00000	
66	17.44		.178	18759	VV	0.00000	
67	17.96		.253	83496	VV	0.00000	
68	18.03		.170	56650	VV	0.00000	
69	18.76		.241	330346	VV	0.00000	
70	19.59		.263	31583	VV	0.00000	
71	19.90		.179	16658	VV	0.00000	
72	20.13	20.18	.216	40414	VV	.04159	<i>Heptachlor epoxide</i>
73	20.66		.169	43956	VV	0.00000	
74	20.79		.193	53119	VV	0.00000	
75	21.01		.175	33057	VV	0.00000	
76	21.32		.225	115066	VV	0.00000	
77	22.17		.276	130151	FU	0.00000	
78	22.65	22.58	.179	5921	VV	.00655	<i>Endosulfan I</i>
79	22.92		.235	21239	VV	0.00000	
80	23.33		.316	43336	VV	0.00000	
81	23.50		.152	16544	VV	0.00000	
82	23.84		.226	21001	VV	0.00000	
83	24.06		.154	11215	VV	0.00000	
84	24.41		.195	237997	VV	0.00000	
85	24.75		.235	86490	VV	0.00000	
86	25.05		.177	35002	VV	0.00000	
87	25.21		.132	26604	VV	0.00000	
88	25.39		.199	61485	VV	0.00000	
89	25.93		.378	175866	VV	0.00000	

9/20/97

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
90	26.59		.169	58106	UU	0.00000	
91	26.85	26.88	.309	80037	UU	.12160	<del>Endrin</del> Tax
2	27.31		.177	35243	UU	0.00000	
93	27.44		.151	30753	UU	0.00000	
94	27.81		.300	160693	UU	0.00000	
95	28.02		.188	59085	UU	0.00000	
96	28.45		.243	68276	UU	0.00000	
97	28.63		.135	31368	UU	0.00000	
98	28.88		.176	115019	UU	0.00000	
99	29.11		.277	72894	UU	0.00000	
100	29.56		.211	79865	UU	0.00000	
101	29.78		.189	57296	UU	0.00000	
102	30.10	30.06	.247	80735	UU	.10453	<del>Endosulfan II</del>
103	30.41		.235	57943	UU	0.00000	
104	30.67		.275	96519	UU	0.00000	
105	31.16		.289	78113	UU	0.00000	
106	31.46		.188	45198	UU	0.00000	
107	31.69		.309	180516	UU	0.00000	
108	32.26		.384	140775	UU	0.00000	
109	32.60		.143	30947	UU	0.00000	
110	32.81		.142	30498	UU	0.00000	
111	32.96		.179	46346	UU	0.00000	
112	33.23		.262	69992	UU	0.00000	
113	33.60		.234	196157	UU	0.00000	
114	33.97		.157	63105	UU	0.00000	
115	34.09	34.11	.253	106459	UU	.15840	<del>Endosulfan sulfate</del>
116	34.61		.206	109686	UU	0.00000	
7	34.83		.212	38214	UU	0.00000	Tax peak
118	35.21		.320	89435	UU	0.00000	
119	35.70		.380	170638	UU	0.00000	
120	36.24		.172	114247	UU	0.00000	
121	36.57		.209	58516	UU	0.00000	
122	36.75		.182	32019	UU	0.00000	
123	36.96		.134	20587	UU	0.00000	
124	37.46		.370	74633	UU	0.00000	
125	37.83		.184	34692	UU	0.00000	
126	38.12		.223	32232	UU	0.00000	
127	38.46		.273	63046	UU	0.00000	
128	38.70		.184	39549	UU	0.00000	
129	38.90		.201	49150	UU	0.00000	
130	39.11		.213	42103	UU	0.00000	
131	39.64		.203	14972	UU	0.00000	
132	39.97	#39.99	.149	106479	UU	.92099	<del>.10496</del>
133	40.50		.251	10473	UU	0.00000	Decachlorobiphenyl

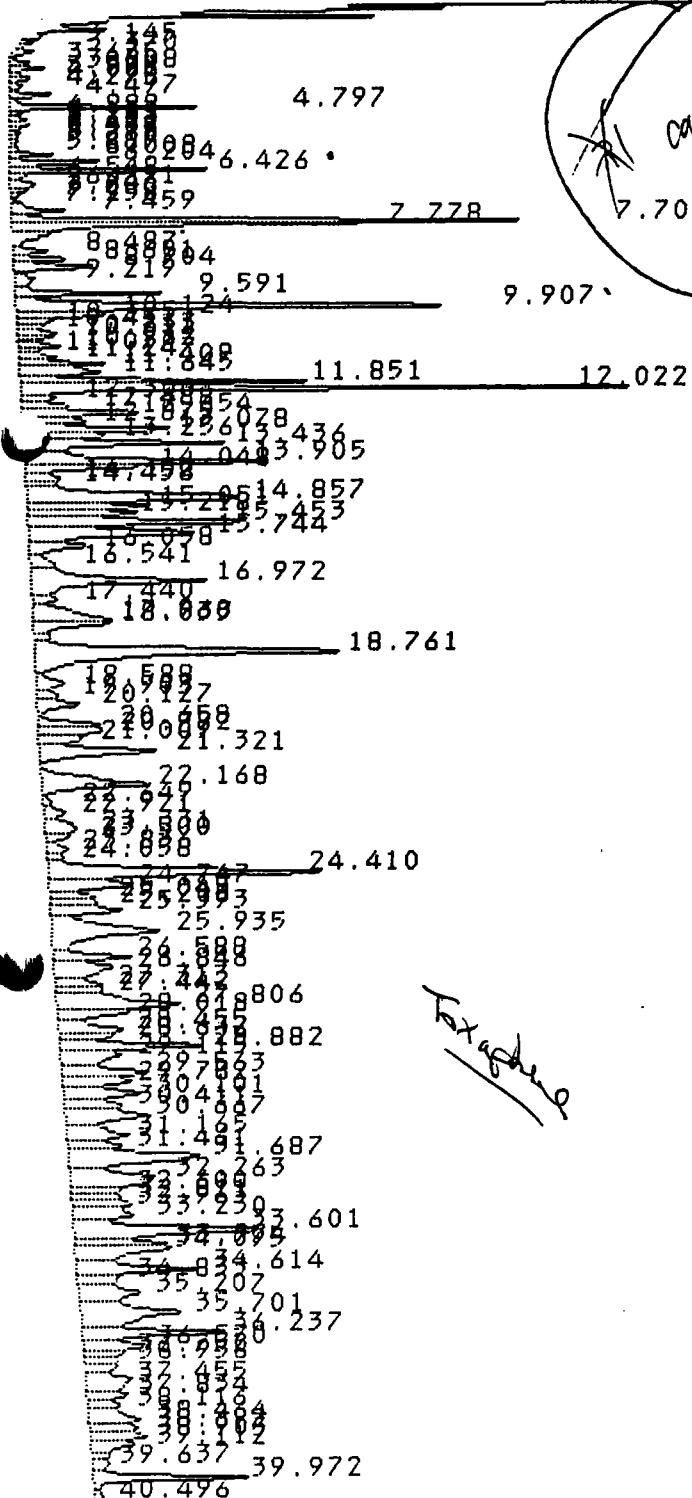
Total Area : 8474322 Total PPB : .924

Report Time : 0221 20Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_029.RES

9/20/97

IEA Pesticide Standard Report

Sample Name : 970836702 Inj on 0135 20Sep1997  
Result File : /RESULT/P2091297\_029.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1  $\mu$ l



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1W

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	0.87	JP
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : 970836701 Report No :100.00  
 Result File : /RESULT/P2091297\_026.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID. Inj. Vol. : 1 uL  
 Instrument : HP5890PZ  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 2254 19Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 14 Bottle no. : 14

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.15		.037	2508	VU	0.00000	
	3.28		.046	1392	VU	0.00000	
	3.41		.116	6136	VU	0.00000	
4	3.62		.115	4773	VU	0.00000	
5	3.81		.085	19690	VU	0.00000	
6	4.00		.057	2408	VU	0.00000	
7	4.08		.114	7966	VU	0.00000	
8	4.28		.115	5070	VU	0.00000	
9	4.50		.069	8791	VU	0.00000	
10	4.76		.149	6346	VU	0.00000	
11	4.99		.073	3600	VU	0.00000	
12	5.13		.085	3614	VU	0.00000	
13	5.25		.109	6665	VU	0.00000	
14	5.49		.058	1901	VU	0.00000	
15	5.61		.081	3504	VU	0.00000	
16	5.71		.070	1418	VU	0.00000	
17	5.90		.090	2595	VU	0.00000	
18	6.02		.096	5538	VU	0.00000	
	6.43		.069	70791	VU	0.00000	
20	6.80		.145	8101	VU	0.00000	
21	7.25		.118	3984	VU	0.00000	
22	7.47		.096	4727	VU	0.00000	
23	7.72	7.73	.126	231820	VU	0.05560	Tetrachloro-m-xylene
24	8.04		.175	15254	VU	0.00000	
25	8.49		.106	4286	VU	0.00000	
26	8.57		.059	1708	VU	0.00000	
27	8.69		.083	16486	VU	0.00000	
28	8.92		.142	33495	VU	0.00000	
29	9.24		.191	13431	VU	0.00000	
30	9.60		.093	37703	VU	0.00000	
31	9.91		.138	173060	VU	0.00000	
32	10.13		.127	68587	VU	0.00000	
33	10.33		.099	10618	VU	0.00000	
34	10.45		.113	13625	VU	0.00000	
35	10.64		.168	16600	VU	0.00000	
36	10.97		.138	67113	VU	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
37	11.24		.135	14434	UU	0.00000	
38	11.42		.112	27068	UU	0.00000	
39	11.57		.112	30392	UU	0.00000	
40	11.64		.108	29426	UU	0.00000	
41	11.85.		.102	72565	UU	0.00000	
42	12.03		.116	119019	UU	0.00000	
43	12.30		.147	14001	UU	0.00000	
44	12.49		.117	14812	UU	0.00000	
45	12.66	12.70	.131	53613	UU	.07557	gamma-BHC (Lindane) mixed
46	12.88		.129	30815	UU	0.00000	
47	13.09		.159	64355	UU	0.00000	
48	13.44		.157	77267	UU	0.00000	
49	13.60		.099	13853	UU	0.00000	
50	13.75		.124	23230	UU	0.00000	
51	13.94		.203	59917	UU	0.00000	
52	14.39		.289	27866	UU	0.00000	
53	14.77		.213	163670	UU	0.00000	
54	15.05		.149	78018	UU	0.00000	
55	15.22		.121	36279	UU	0.00000	
56	15.46		.162	117234	UU	0.00000	
57	15.75		.244	89410	UU	0.00000	
58	16.06		.197	29188	UU	0.00000	
59	16.57		.260	35070	UU	0.00000	
60	16.97		.240	103456	UU	0.00000	
61	17.24		.163	15553	UU	0.00000	
62	17.44		.213	27165	UU	0.00000	
63	17.84		.261	45158	UU	0.00000	
64	18.07		.201	67442	UU	0.00000	
65	18.43		.192	15707	UU	0.00000	
66	18.77		.282	199320	UU	0.00000	
67	19.61		.237	16494	UU	0.00000	
68	19.90		.216	19266	UU	0.00000	
69	20.13	20.18	.205	58008	UU	.05970	Heptachlor epoxide
70	20.81		.485	114929	UU	0.00000	TAX
71	21.33		.281	66782	UU	0.00000	
72	22.18		.256	107363	PU	0.00000	
73	22.89		.356	34755	UU	0.00000	BQL
74	23.21	23.19	.230	12742	UU	.01323	gamma-Chlordane
75	23.49		.209	12440	UU	0.00000	TAX
76	23.84		.239	12994	UU	0.00000	
77	24.42		.213	202701	UU	0.00000	
78	24.75		.230	43676	UU	0.00000	
79	25.05		.163	20160	UU	0.00000	
80	25.21		.188	33000	UU	0.00000	
81	25.41		.204	31162	UU	0.00000	
82	25.96		.321	78740	UU	0.00000	
83	26.33		.145	9512	UU	0.00000	
84	26.59		.167	47423	UU	0.00000	
85	26.84	26.88	.188	42966	UU	.06528	Endrin BAL
86	27.03		.147	28234	UU	0.00000	TAX
87	27.14		.169	30938	UU	0.00000	
88	27.43		.175	19507	UU	0.00000	

9/20/97  
FBI

IEA Pesticide Standard Report

Sample Name : 970836701 Report No : 4.010  
 Result File : /RESULT/P3082897\_094.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Ru. Time : 46.00 Mins. Injected on 1631 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3 / 83 Bottle no. : 82

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	5.38		.091	7434	PV	0.00000	
	6.35		.115	5961	PV	0.00000	
	6.63		.078	2482	VV	0.00000	
4	6.85		.096	3643	VV	0.00000	
5	7.29		.096	41887	VB	0.00000	
6	7.65		.101	4103	BV	0.00000	
7	7.76		.080	3116	VB	0.00000	
8	9.05		.102	56709	VV	0.00000	
9	9.32		.111	3856	VV	0.00000	
10	9.68		.084	3340	VV	0.00000	
1	11.26		.067	2386	BV	0.00000	
12	11.41		.092	59075	VV	0.00000	
13	11.77		.094	13085	PV	0.00000	
14	12.01	#12.01	.089	56164	VB	0.02357	Tetrachloro-m-xylene
						11633	
15	12.59		.102	5569	PV	0.00000	
16	13.19		.144	28565	VV	0.00000	
17	13.44		.167	13074	VV	0.00000	
18	13.66		.111	14092	VV	0.00000	
	13.82		.093	18024	VV	0.00000	
20	14.06		.094	20103	VV	0.00000	
21	14.18		.117	127591	VV	0.00000	
22	14.38		.075	8557	VV	0.00000	
23	14.51		.130	27666	VV	0.00000	
24	15.02		.190	17217	VV	0.00000	
25	15.15		.119	10990	VV	0.00000	
26	15.64		.171	13846	VV	0.00000	
27	15.94		.175	12973	VV	0.00000	
28	16.30		.136	40934	VV	0.00000	
29	16.58		.214	31662	VV	0.00000	
30	16.88		.109	44093	VV	0.00000	
31	17.05		.111	45420	VV	0.00000	
32	17.32	17.27	.155	14721	VV	.02878	gamma-BHC (Hindane)
33	17.45		.114	12241	VV	0.00000	
34	17.69	17.66	.149	35471	VV	.11510	beta-BHC
35	17.96		.145	19954	VV	0.00000	
6	18.08		.131	53772	VV	0.00000	

9/20/97  
2

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
37	18.29		.134	26568	VV	0.00000	
38	18.55		.126	16247	VV	0.00000	
9	18.72		.116	28438	VV	0.00000	
40	18.86		.157	54828	VV	0.00000	
41	19.15	19.16	.183	33139	VV	.06081	<del>Heptachlor</del> NC
42	19.34	19.38	.130	16404	VV	.03470	<del>delta-HC</del> NC
43	19.52		.134	18294	VV	0.00000	
44	19.78		.206	142967	VV	0.00000	
45	19.99		.118	74471	VV	0.00000	
46	20.11		.107	33330	VV	0.00000	
47	20.46		.105	12982	VV	0.00000	
48	20.67	20.72	.288	94442	VV	.21342	<del>Aldrin</del> NC
49	21.12		.122	48714	VV	0.00000	
50	21.31		.153	32877	VV	0.00000	
51	21.46		.211	44264	VV	0.00000	
52	21.72		.128	24376	VV	0.00000	
53	21.90		.131	45824	VV	0.00000	
54	22.05		.102	21105	VV	0.00000	
55	22.16		.100	22882	VV	0.00000	
56	22.26		.162	29590	VV	0.00000	
57	22.53		.125	56551	VV	0.00000	
58	22.67		.121	38587	VV	0.00000	
59	22.95		.171	130472	VV	0.00000	
60	23.07		.093	55434	VV	0.00000	
61	23.20	23.14	.138	61720	VV	.12947	<del>Heptachlor epoxide</del>
62	23.64		.172	102230	VV	0.00000	
63	23.92	23.92	.145	51435	VV	.11156	<del>Gamma-Chlordane</del> Tax
64	24.11		.104	25643	VV	0.00000	
65	24.23		.136	57046	VV	0.00000	
66	24.59	24.58	.297	119811	VV	.29313	<del>Endosulfan I</del> NC
67	24.89		.100	24190	VV	0.00000	
68	24.98		.105	27979	VV	0.00000	
69	25.12		.127	39111	VV	0.00000	
70	25.39	25.40	.160	187591	VV	.52686	<del>4'-DDT</del> NC
71	25.53		.056	19754	VV	0.00000	
72	25.64	25.70	.136	94301	VV	.24940	<del>Dieldrin</del> NC
73	25.87		.111	66350	VV	0.00000	
74	25.96		.093	44908	VV	0.00000	
75	26.13		.147	52587	VV	0.00000	
76	26.44		.172	62736	VV	0.00000	
77	26.57		.164	70740	VV	0.00000	
78	26.79		.152	98102	VV	0.00000	
79	26.91	26.92	.141	65105	VV	.21931	<del>-----</del> Tax
80	27.15		.274	107114	VV	0.00000	
81	27.51	27.55	.191	114640	VV	.34735	<del>Endosulfan II</del>
82	27.71		.140	62624	VV	0.00000	
83	27.85		.085	31317	VV	0.00000	
84	27.95		.133	51505	VV	0.00000	
85	28.14		.161	65604	VV	0.00000	
86	28.31		.128	54637	VV	0.00000	
87	28.43	28.40	.099	32541	VV	.11457	<del>4,4'-DDT</del> NC
88	28.58	28.58	.119	39293	VV	.13717	<del>Endrin aldehyde</del> NC

9/20/01

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
89	28.71		.163	66971	VV	0.00000	
90	28.88		.191	79249	VV	0.00000	
1	29.16	29.11	.247	88213	VV	.30122	
92	29.50		.121	258761	VV	0.00000	
93	29.67		.134	52634	VV	0.00000	
94	29.95		.304	100472	VV	0.00000	
95	30.34		.171	52316	VV	0.00000	
96	30.81		.244	111781	VV	0.00000	
97	31.55		.304	57825	VV	0.00000	
98	32.50		.451	57207	VV	0.00000	
99	33.26		.253	64779	VV	0.00000	
100	33.65		.194	140153	VV	0.00000	
101	34.20		.283	40912	VV	0.00000	
102	35.12		.174	9605	VV	0.00000	
103	35.39		.176	13579	VV	0.00000	
104	36.10		.205	52179	VV	0.00000	
105	36.62		.189	8984	VV	0.00000	
106	37.16		.414	20813	VV	0.00000	
107	39.35		.298	12551	VV	0.00000	
108	40.01	*40.03	.234	73396	VV	0.00000	Decachlorobiphenyl
109	41.18		.313	13788	VB	0.00000	

Total Area : 5202376 Total PPB : 3.169

Report Time : 2053 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_094.RES

9/20/97  
 (TJ)

IEA Pesticide Standard Report

Sample Name : 970836701 Inj on 1631 08Sep1997  
Result File : /RESULT/P3082897\_094.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul

5.380

6.357

6.849

7.362 7.291

8.522 9.046

9.652

11.266 11.414

11.774 12.013

12.592

13.189

13.586

14.185

14.566

14.969

15.396

16.836

17.87

17.982

18.063

19.396

19.985

20.286

20.673

21.146

21.95

22.346

22.955

23.545

23.933

25.330

26.731

27.914

28.527

29.574

30.122

31.555

32.503

33.260

33.555

34.156

35.119

35.103

37.155

38.348

40.010

41.185

6LCD  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

Instrument ID: HP5890P2 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column:DB-1701 ID: 0.53 (mm) Date(s) Analyzed: 09/13/97

COMPOUND	RT OF STANDARDS LOW	STANDARDS MID	STANDARDS HIGH	MEAN RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	11.06	11.07	11.06	11.06	11.01	11.11
beta-BHC	17.09	17.10	17.09	17.09	17.04	17.14
delta-BHC	18.90	18.90	18.90	18.90	18.85	18.95
gamma-BHC (Lindane)	12.70	12.70	12.69	12.70	12.65	12.75
Heptachlor	13.68	13.68	13.67	13.68	13.63	13.73
Aldrin	15.16	15.16	15.16	15.16	15.11	15.21
Heptachlor epoxide	20.18	20.18	20.17	20.18	20.11	20.25
Endosulfan_I	22.59	22.58	22.57	22.58	22.51	22.65
Dieldrin	25.53	25.52	25.52	25.52	25.45	25.59
4,4'-DDE	24.64	24.64	24.64	24.64	24.57	24.71
Endrin	26.89	26.88	26.88	26.88	26.81	26.95
Endosulfan_II	30.06	30.06	30.06	30.06	29.99	30.13
4,4'-DDD	30.03	30.02	30.02	30.02	29.95	30.09
Endosulfan sulfate	34.12	34.11	34.12	34.12	34.05	34.19
4,4'-DDT	30.95	30.94	30.94	30.94	30.87	31.01
Methoxychlor	34.43	34.43	34.43	34.43	34.36	34.50
Endrin ketone	36.05	36.04	36.05	36.05	35.98	36.12
Endrin aldehyde	32.48	32.47	32.47	32.47	32.40	32.54
alpha-Chlordane	23.65	23.65	23.65	23.65	23.58	23.72
gamma-Chlordane	23.19	23.20	23.19	23.19	23.12	23.26
Tetrachloro-m-xylene	7.73	7.74	7.73	7.73	7.68	7.78
Decachlorobiphenyl	39.99	39.99	39.98	39.99	39.89	40.09

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are +/-0.05 minutes for all compounds that elute before Heptachlor epoxide, +/-0.07 minutes for all other compounds, except +/-0.10 minutes for Decachlorobiphenyl.

**6LCE**  
**LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES**

**Lab Name:** INDUSTRIAL & ENVIRONMENTAL **Contract:** SOW 10/92

**Lab Code:** IEA **Case No.:** 1364-226 **SDG No.:** 08367

**Instrument ID:** HP5890P2 **Level (x low):** low 1.0 mid 4.0 high 16.0

**GC Column:** DB-1701 **ID:** 0.53 (mm) **Date(s) Analyzed:** 09/13/97

<b>COMPOUND</b>	<b>CALIBRATION FACTORS</b>				<b>%RSD</b>
	<b>LOW</b>	<b>MID</b>	<b>HIGH</b>	<b>MEAN</b>	
alpha-BHC	5418200	6599050	7924900	6647383	18.9
beta-BHC	5595400	5289350	5408400	5431050	2.8
delta-BHC	4963600	4988650	5983250	5311833	10.9
gamma-BHC (Lindane)	6171200	7094700	8017812	7094571	13.0
Heptachlor	9561600	9931900	9238788	9577429	3.6
Aldrin	7407200	7254600	8382625	7681475	8.0
Heptachlor epoxide	10397200	9716500	9602500	9905400	4.3
Endosulfan_I	9031000	9044300	8208688	8761329	5.5
Dieldrin	8097500	8297300	8633044	8342615	3.2
4,4'-DDE	6326800	6312950	7802231	6813994	12.6
Endrin	6331700	6582250	7033400	6649117	5.3
Endosulfan_II	8145200	7723475	8220556	8029744	3.3
4,4'-DDD	5476600	6167275	6643694	6095856	9.6
Endosulfan_sulfate	7054500	6720850	6825219	6866856	2.5
4,4'-DDT	3903700	5356250	5561650	4940533	18.3
Methoxychlor	3158420	4062625	3590404	3603816	12.5
Endrin_ketone	5746200	6296000	6489988	6177396	6.2
Endrin_aldehyde	4183200	4082225	3997694	4087706	2.3
alpha-Chlordane	9428200	8947400	9067125	9147575	2.7
gamma-Chlordane	10249400	9632100	9654538	9845346	3.6
Tetrachloro-m-xylene	7505800	8339550	7887238	7910862	5.3
Decachlorobiphenyl	10908200	10144550	8251869	9768206	14.0

\* Surrogate factors are measured from Standard Mix A analyses.

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6LCD  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

Instrument ID: HP5890P3 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: RTX-35 ID: 0.53 (mm) Date(s) Analyzed: 08/29/97

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	15.37	15.37	15.37	15.37	15.32	15.42
beta-BHC	17.66	17.66	17.66	17.66	17.61	17.71
delta-BHC	19.38	19.38	19.38	19.38	19.33	19.43
gamma-BHC (Lindane)	17.27	17.27	17.27	17.27	17.22	17.32
Heptachlor	19.16	19.16	19.16	19.16	19.11	19.21
Aldrin	20.72	20.72	20.72	20.72	20.67	20.77
Heptachlor epoxide	23.14	23.14	23.14	23.14	23.07	23.21
Endosulfan_I	24.58	24.58	24.58	24.58	24.51	24.65
Dieldrin	25.70	25.70	25.70	25.70	25.63	25.77
4,4'-DDE	25.40	25.40	25.40	25.40	25.33	25.47
Endrin	26.92	26.92	26.92	26.92	26.85	26.99
Endosulfan_II	27.56	27.55	27.55	27.55	27.48	27.62
4,4'-DDD	27.34	27.34	27.35	27.34	27.27	27.41
Endosulfan_sulfate	29.11	29.11	29.11	29.11	29.04	29.18
4,4'-DDT	28.40	28.40	28.40	28.40	28.33	28.47
Methoxychlor	31.32	31.32	31.32	31.32	31.25	31.39
Endrin_ketone	31.89	31.89	31.89	31.89	31.82	31.96
Endrin_aldehyde	28.58	28.57	28.58	28.58	28.51	28.65
alpha-Chlordane	24.52	24.52	24.52	24.52	24.45	24.59
gamma-Chlordane	23.92	23.91	23.92	23.92	23.85	23.99
Tetrachloro-m-xylene	12.02	12.01	12.01	12.01	11.96	12.06
Decachlorobiphenyl	40.03	40.02	40.03	40.03	39.93	40.13

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are +/-0.05 minutes for all compounds that elute before Heptachlor epoxide, +/-0.07 minutes for all other compounds, except +/-0.10 minutes for Decachlorobiphenyl.

6LCE  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

Instrument ID: HP5890P3 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: RTX-35 ID: 0.53 (mm) Date(s) Analyzed: 08/29/97

COMPOUND	LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	5339000	5171750	8044162	6184971	26.1
beta-BHC	3313000	3081750	2833112	3075954	7.8
delta-BHC	4902200	4727000	4980975	4870058	2.7
gamma-BHC (Lindane)	5404200	5114500	7546775	6021825	22.1
Heptachlor	6140000	5449700	6980688	6190129	12.4
Aldrin	4976000	4425100	4275800	4558967	8.1
Heptachlor epoxide	5302400	4767150	4356238	4808596	9.9
Endosulfan_I	4438800	4087350	5321800	4615983	13.8
Dieldrin	4216400	3781100	5192131	4396544	16.4
4,4'-DDE	3804400	3560575	3592219	3652398	3.6
Endrin	3189300	2973250	4204075	3455542	19.0
Endosulfan_II	3591300	3300425	3139300	3343675	6.8
4,4'-DDD	2968400	2754900	3959225	3212975	19.9
Endosulfan_sulfate	3087300	2928550	2684381	2900077	7.0
4,4'-DDT	2956000	2863875	4011556	3277144	19.4
Methoxychlor	1598440	1425810	1671289	1565180	8.0
Endrin_ketone	3432200	3301650	3134681	3289510	4.5
Endrin_aldehyde	2951200	2864425	2533569	2783065	7.9
alpha-Chlordane	4694400	4275400	3923262	4297688	9.0
gamma-Chlordane	5156400	4606550	4285925	4682958	9.4
Tetrachloro-m-xylene	5309800	4807300	6114788	5410629	12.2
Decachlorobiphenyl	4841700	4338975	5032519	4737731	7.6

\* Surrogate factors are measured from Standard Mix A analyses.

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6LCF  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Instrument ID: HP5890P2

Date(s) Analyzed: 09/13/97

GC Column:DB-1701 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	TO	CALIBRATION FACTOR
Toxaphene	0.50	*1 *2 *3 4 5	30.67 31.73 33.21	30.60 31.66 33.14	30.74 31.80 33.28	134464 156248 156684
Aroclor-1016	0.10	*1 *2 *3 4 5	9.91 11.31 13.27	9.84 11.24 13.20	9.98 11.38 13.34	266920 626060 938580
Aroclor-1221	0.20	*1 *2 *3 4 5	9.11 9.68 9.91	9.04 9.61 9.84	9.18 9.75 9.98	107765 86510 293645
Aroclor-1232	0.10	*1 *2 *3 4 5	9.91 11.31 13.28	9.84 11.24 13.21	9.98 11.38 13.35	302190 300870 418460
Aroclor-1242	0.10	*1 *2 *3 4 5	13.27 15.15 16.61	13.20 15.08 16.54	13.34 15.22 16.68	605440 309340 341890
Aroclor-1248	0.10	*1 *2 *3 4 5	15.04 15.13 19.69	14.97 15.06 19.62	15.11 15.20 19.76	506320 516920 1132500
Aroclor-1254	0.10	*1 *2 *3 4 5	25.08 26.87 29.87	25.01 26.80 29.80	25.15 26.94 29.94	869450 640570 797750
Aroclor-1260	0.10	*1 *2 *3 4 5	27.76 29.88 33.42	27.69 29.81 33.35	27.83 29.95 33.49	948640 115670 1151170

\* Denotes required peaks

6LCF  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Instrument ID: HP5890P2

Date(s) Analyzed: 09/13/97

GC Column:DB-1701 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	TO	CALIBRATION FACTOR
Aroclor-1016	0.10	*1	9.91	9.84	9.98	266920
		*2	11.31	11.24	11.38	626060
		*3	13.27	13.20	13.34	938580
		4				
		5				
Aroclor-1221	0.20	*1	9.11	9.04	9.18	107765
		*2	9.68	9.61	9.75	86510
		*3	9.91	9.84	9.98	293645
		4				
		5				
Aroclor-1232	0.10	*1	9.91	9.84	9.98	302190
		*2	11.31	11.24	11.38	300870
		*3	13.28	13.21	13.35	418460
		4				
		5				
Aroclor-1242	0.10	*1	13.27	13.20	13.34	605440
		*2	15.15	15.08	15.22	309340
		*3	16.61	16.54	16.68	341890
		4				
		5				
Aroclor-1248	0.10	*1	15.04	14.97	15.11	506320
		*2	15.13	15.06	15.20	516920
		*3	19.69	19.62	19.76	1132500
		4				
		5				
Aroclor-1254	0.10	*1	25.08	25.01	25.15	869450
		*2	26.87	26.80	26.94	640570
		*3	29.87	29.80	29.94	797750
		4				
		5				
Aroclor-1260	0.10	*1	27.76	27.69	27.83	948640
		*2	29.88	29.81	29.95	115670
		*3	33.42	33.35	33.49	1151170
		4				
		5				

\* Denotes required peaks

6LCF  
LOW CONC. WATER PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: INDUSTRIAL & ENVIRONMENTA Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

Instrument ID: HP5890P3 Date(s) Analyzed: 08/28/97 08/29/97

GC Column:RTX-35 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	TO	CALIBRATION FACTOR
Toxaphene	0.50	*1	26.49	26.42	26.56	96632
		*2	29.54	29.47	29.61	120572
		*3	29.93	29.86	30.00	92916
		4				
		5				
Aroclor-1016	0.10	*1	15.02	14.95	15.09	148090
		*2	17.12	17.05	17.19	336810
		*3	19.05	18.98	19.12	638020
		4				
		5				
Aroclor-1221	0.20	*1	10.17	10.10	10.24	62710
		*2	13.98	13.91	14.05	79970
		*3	15.02	14.95	15.09	159340
		4				
		5				
Aroclor-1232	0.10	*1	15.02	14.95	15.09	165440
		*2	17.12	17.05	17.19	177020
		*3	19.06	18.99	19.13	300180
		4				
		5				
Aroclor-1242	0.10	*1	15.02	14.95	15.09	122630
		*2	17.12	17.05	17.19	228420
		*3	19.06	18.99	19.13	430390
		4				
		5				
Aroclor-1248	0.10	*1	20.63	20.56	20.70	253130
		*2	20.84	20.77	20.91	233260
		*3	21.97	21.90	22.04	284510
		4				
		5				
Aroclor-1254	0.10	*1	25.95	25.88	26.02	414070
		*2	26.52	26.45	26.59	330560
		*3	27.06	26.99	27.13	196850
		4				
		5				
Aroclor-1260	0.10	*1	26.02	25.95	26.09	238880
		*2	26.61	26.54	26.68	364170
		*3	27.06	26.99	27.13	399740
		4				
		5				

\* Denotes required peaks

**6LCG**  
**LOW CONC. WATER PESTICIDE ANALYTE RESOLUTION SUMMARY**

**Lab Name:** INDUSTRIAL & ENVIRONMENTAL **Contract:** SOW 10/92

**Lab Code:** IEA **Case No.:** 1364-226

**SDG No.:** 08367

**GC Column (1):** RTX-35 **ID:** 0.53 (mm) **Instrument ID (1):** HP5890P3

**Client Sample No. (standard 1):** RESC89 **Lab Sample ID (1):** RESC89

**Date Analyzed (1):** 08/28/97 **Time Analyzed (1):** 2127

<b>ANALYTE</b>		<b>RT</b>	<b>RESOLUTION (%)</b>
01	Tetrachloro-m-xylene	12.02	100.0
02	gamma-Chlordane	23.92	100.0
03	Endosulfan I	24.58	100.0
04	4,4'-DDE	25.40	100.0
05	Dieldrin	25.70	100.0
06	Endosulfan sulfate	29.11	100.0
07	Methoxychlor	31.32	100.0
08	Endrin ketone	31.89	100.0
09	Decachlorobiphenyl	40.04	

**GC Column (2):** DB-1701 **ID:** 0.53 (mm) **Instrument ID (2):** HP5890P2

**Client Sample No. (standard 2):** RESC92 **Lab Sample ID (2):** RESC92

**Date Analyzed (2):** 09/12/97 **Time Analyzed (2):** 2308

<b>ANALYTE</b>		<b>RT</b>	<b>RESOLUTION (%)</b>
01	Tetrachloro-m-xylene	7.73	100.0
02	Endosulfan I	22.56	100.0
03	gamma-Chlordane	23.20	100.0
04	4,4'-DDE	24.65	100.0
05	Dieldrin	25.51	100.0
06	Endosulfan sulfate	34.12	95.5
07	Methoxychlor	34.43	100.0
08	Endrin ketone	36.05	100.0
09	Decachlorobiphenyl	39.99	

**Resolution of two adjacent peaks must be calculated as a percentage of the height of the smaller peak, and must be greater than or equal to 60.0%.**

7LCD  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column:DB-1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/13/97

EPA Sample No. (PIBLK): \_\_\_\_\_ Date Analyzed : \_\_\_\_\_

Lab Sample ID (PIBLK): \_\_\_\_\_ Time Analyzed : \_\_\_\_\_

Client Sample No. (PEM): PEM2P Date Analyzed : 09/13/97

Lab Sample ID (PEM): PEM2P Time Analyzed : 0002

PEM COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	11.05	11.01	11.11	0.0088	0.0100	12.0
beta-BHC	17.10	17.04	17.14	0.011	0.0100	10.0
gamma-BHC (Lindane)	12.69	12.65	12.75	0.0091	0.0100	9.0
Endrin	26.88	26.81	26.95	0.049	0.050	2.0
4,4'-DDT	30.94	30.87	31.01	0.10	0.10	0.0
Methoxychlor	34.43	34.36	34.50	0.25	0.25	0.0

4,4'-DDT % breakdown (1): 6.6 Endrin % breakdown (1): 10.8

Combined % breakdown (1): 17.4

#### QC LIMITS

%D of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7LCD  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column:DB-1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/13/97

Client Sample No. (PIBLK): PIBLK2B Date Analyzed : 09/13/97

Lab Sample ID (PIBLK): PIBLK2B Time Analyzed : 1236

Client Sample No. (PEM): PEM2Q Date Analyzed : 09/13/97

Lab Sample ID (PEM): PEM2Q Time Analyzed : 1330

PEM COMPOUND	RT	RT WINDOW FROM		CALC AMOUNT (ng)	NOM AMOUNT (ng)	\$D
		FROM	TO			
alpha-BHC	11.05	11.01	11.11	0.0088	0.0100	12.0
beta-BHC	17.08	17.04	17.14	0.0100	0.0100	0.0
gamma-BHC (Lindane)	12.69	12.65	12.75	0.0087	0.0100	13.0
Endrin	26.86	26.81	26.95	0.046	0.050	8.0
4,4'-DDT	30.93	30.87	31.01	0.099	0.10	1.0
Methoxychlor	34.42	34.36	34.50	0.23	0.25	8.0

4,4'-DDT % breakdown (1): 8.3

Endrin % breakdown (1): 14.0

Combined % breakdown (1): 22.3

#### QC LIMITS

%L of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7LCD  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column:DB-1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/13/97

Client Sample No.(PIBLK): PIBLK3B Date Analyzed : 09/19/97

Lab Sample ID (PIBLK): PIBLK3B Time Analyzed : 2012

Client Sample No.(PEM): PEM3G Date Analyzed : 09/19/97

Lab Sample ID (PEM): PEM3G Time Analyzed : 2106

PEM COMPOUND	RT	RT FROM	WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	11.05	11.01	11.11	0.0089	0.0100	11.0
beta-BHC	17.08	17.04	17.14	0.013	0.0100	30.0
gamma-BHC (Lindane)	12.68	12.65	12.75	0.0092	0.0100	8.0
Endrin	26.86	26.81	26.95	0.047	0.050	6.0
4,4'-DDT	30.93	30.87	31.01	0.11	0.10	10.0
Methoxychlor	34.42	34.36	34.50	0.25	0.25	0.0

4,4'-DDT % breakdown (1): 6.9 Endrin % breakdown (1): 17.4

Combined % breakdown (1): 24.3

#### QC LIMITS

%D of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

<sup>7LCD</sup>  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column: RTX-35 ID: 0.53 (mm) Init. Calib. Date(s): 08/28/97 08/29/97

EPA Sample No. (PIBLK): \_\_\_\_\_ Date Analyzed : \_\_\_\_\_

Lab Sample ID (PIBLK): \_\_\_\_\_ Time Analyzed : \_\_\_\_\_

Client Sample No. (PEM): PEM1I Date Analyzed : 08/28/97

Lab Sample ID (PEM): PEM1I Time Analyzed : 2222

PEM COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	15.37	15.32	15.42	0.0100	0.0100	0.0
beta-BHC	17.67	17.61	17.71	0.0100	0.0100	0.0
gamma-BHC (Lindane)	17.27	17.22	17.32	0.0100	0.0100	0.0
Endrin	26.92	26.85	26.99	0.046	0.050	8.0
4,4'-DDT	28.40	28.33	28.47	0.091	0.10	9.0
Methoxychlor	31.32	31.25	31.39	0.23	0.25	8.0

4,4'-DDT % breakdown (1): 1.9

Endrin % breakdown (1): 7.2

Combined % breakdown (1): 9.1

#### QC LIMITS

%D of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7LCD  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column: RTX-35 ID: 0.53 (mm) Init. Calib. Date(s): 08/28/97 08/29/97

Client Sample No. (PIBLK): PIBLK9N Date Analyzed : 08/29/97

Lab Sample ID (PIBLK): PIBLK9N Time Analyzed : 1121

Client Sample No. (PEM): PEM1J Date Analyzed : 08/29/97

Lab Sample ID (PEM): PEM1J Time Analyzed : 1411

PEM COMPOUND	RT	RT WINDOW FROM	WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	15.37	15.32	15.42	0.011	0.0100	10.0
beta-BHC	17.67	17.61	17.71	0.011	0.0100	10.0
gamma-BHC (Lindane)	17.27	17.22	17.32	0.011	0.0100	10.0
Endrin	26.92	26.85	26.99	0.052	0.050	4.0
4,4'-DDT	28.40	28.33	28.47	0.10	0.10	0.0
Methoxychlor	31.32	31.25	31.39	0.26	0.25	4.0

4,4'-DDT % breakdown (1): 1.8 Endrin % breakdown (1): 7.4

Combined % breakdown (1): 9.2

#### QC LIMITS

%D of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

**7LCD**  
**LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY**

**Lab Name:** INDUSTRIAL & ENVIRONMENTAL **Contract:** SOW 10/92

**Lab Code:** IEA **Case No.:** 1364-226 **SDG No.:** 08367

**GC Column:** RTX-35 **ID:** 0.53 (mm) **Init. Calib. Date(s):** 08/28/97 08/29/97

**Client Sample No. (PIBLK):** PIBLK1N **Date Analyzed :** 09/08/97

**Lab Sample ID (PIBLK):** PIBLK1N **Time Analyzed :** 1344

**Client Sample No. (PEM):** PEM2D **Date Analyzed :** 09/08/97

**Lab Sample ID (PEM):** PEM2D **Time Analyzed :** 1440

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	15.36	15.32	15.42	0.011	0.0100	10.0
beta-BHC	17.66	17.61	17.71	0.011	0.0100	10.0
gamma-BHC (Lindane)	17.26	17.22	17.32	0.011	0.0100	10.0
Endrin	26.92	26.85	26.99	0.052	0.050	4.0
4,4'-DDT	28.39	28.33	28.47	0.11	0.10	10.0
Methoxychlor	31.31	31.25	31.39	0.24	0.25	4.0

4,4'-DDT % breakdown (1): 3.0

Endrin % breakdown (1): 14.8

Combined % breakdown (1): 17.8

#### QC LIMITS

%D of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7LCE  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column:DB-1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/13/97

Client Sample No.(PIBLK): PIBLK3C Date Analyzed : 09/20/97

Lab Sample ID (PIBLK): PIBLK3C Time Analyzed : 0659

Client Sample No.(INDA): INDAM9P Date Analyzed : 09/20/97

Lab Sample ID (INDA): INDAM9P Time Analyzed : 0753

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	11.05	11.01	11.11	0.018	0.020	10.0
gamma-BHC (Lindane)	12.68	12.65	12.75	0.018	0.020	10.0
Heptachlor	13.66	13.63	13.73	0.018	0.020	10.0
Endosulfan I	22.55	22.51	22.65	0.018	0.020	10.0
Dieldrin	25.50	25.45	25.59	0.038	0.040	5.0
Endrin	26.86	26.81	26.95	0.039	0.040	2.5
4,4'-DDD	30.00	29.95	30.09	0.036	0.040	10.0
4,4'-DDT	30.93	30.87	31.01	0.035	0.040	12.5
Methoxychlor	34.42	34.36	34.50	0.180	0.200	10.0
Tetrachloro-m-xylene	7.73	7.68	7.78	0.017	0.020	15.0
Decachlorobiphenyl	39.98	39.89	40.09	0.038	0.040	5.0

Client Sample No.(INDB): INDBM9P Date Analyzed : 09/20/97

Lab Sample ID (INDB): INDBM9P Time Analyzed : 0847

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
beta-BHC	17.09	17.04	17.14	0.020	0.020	0.0
delta-BHC	18.89	18.85	18.95	0.020	0.020	0.0
Aldrin	15.16	15.11	15.21	0.020	0.020	0.0
Heptachlor epoxide	20.17	20.11	20.25	0.020	0.020	0.0
4,4'-DDE	24.64	24.57	24.71	0.039	0.040	2.5
Endosulfan II	30.06	29.99	30.13	0.037	0.040	7.5
Endosulfan sulfate	34.11	34.05	34.19	0.036	0.040	10.0
Endrin ketone	36.04	35.98	36.12	0.038	0.040	5.0
Endrin aldehyde	32.47	32.40	32.54	0.035	0.040	12.5
alpha-Chlordane	23.64	23.58	23.72	0.020	0.020	0.0
gamma-Chlordane	23.19	23.12	23.26	0.020	0.020	0.0
Tetrachloro-m-xylene	7.72	7.68	7.78	0.017	0.020	15.0
Decachlorobiphenyl	39.99	39.89	40.09	0.038	0.040	5.0

QC LIMITS: %D of amounts in the Individual Mixes must be less than or equal to 25.0%.

7LCE  
LOW CONC. WATER PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

GC Column: RTX-35 ID: 0.53 (mm) Init. Calib. Date(s): 08/28/97 08/29/97

Client Sample No. (PIBLK): PIBLK1P

Date Analyzed : 09/09/97

Lab Sample ID (PIBLK): PIBLK1P

Time Analyzed : 0147

Client Sample No. (INDA): INDAM8Y

Date Analyzed : 09/09/97

Lab Sample ID (INDA): INDAM8Y

Time Analyzed : 0241

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	15.37	15.32	15.42	0.021	0.020	5.0
gamma-BHC (Lindane)	17.27	17.22	17.32	0.021	0.020	5.0
Heptachlor	19.16	19.11	19.21	0.020	0.020	0.0
Endosulfan I	24.58	24.51	24.65	0.021	0.020	5.0
Dieldrin	25.70	25.63	25.77	0.043	0.040	7.5
Endrin	26.92	26.85	26.99	0.043	0.040	7.5
4,4'-DDD	27.35	27.27	27.41	0.045	0.040	12.5
4,4'-DDT	28.40	28.33	28.47	0.044	0.040	10.0
Methoxychlor	31.32	31.25	31.39	0.210	0.200	5.0
Tetrachloro-m-xylene	12.01	11.96	12.06	0.021	0.020	5.0
Decachlorobiphenyl	40.03	39.93	40.13	0.046	0.040	15.0

Client Sample No. (INDB): INDBM8Y

Date Analyzed : 09/09/97

Lab Sample ID (INDB): INDBM8Y

Time Analyzed : 0336

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
beta-BHC	17.67	17.61	17.71	0.020	0.020	0.0
delta-BHC	19.38	19.33	19.43	0.020	0.020	0.0
Aldrin	20.73	20.67	20.77	0.020	0.020	0.0
Heptachlor epoxide	23.14	23.07	23.21	0.020	0.020	0.0
4,4'-DDE	25.40	25.33	25.47	0.042	0.040	5.0
Endosulfan II	27.56	27.48	27.62	0.044	0.040	10.0
Endosulfan sulfate	29.11	29.04	29.18	0.044	0.040	10.0
Endrin ketone	31.89	31.82	31.96	0.044	0.040	10.0
Endrin aldehyde	28.58	28.51	28.65	0.043	0.040	7.5
alpha-Chlordane	24.52	24.45	24.59	0.021	0.020	5.0
gamma-Chlordane	23.92	23.85	23.99	0.021	0.020	5.0
Tetrachloro-m-xylene	12.01	11.96	12.06	0.020	0.020	0.0
Decachlorobiphenyl	40.03	39.93	40.13	0.043	0.040	7.5

QC LIMITS: %D of amounts in the Individual Mixes must be less than or equal to 25.0%.

8LCD  
LOW CONC. WATER PESTICIDE ANALYTICAL SEQUENCE

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column: DB-1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/13/97

Instrument ID: HP5890P2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				TCX	DCB
	TCX: 7.73	DCB: 39.99		RT #	RT #
01	RESC92	RESC92	09/12/97	2308	7.73
02	PEM2P	PEM2P	09/13/97	0002	7.73
03	AR166019	AR166019	09/13/97	0056	7.73
04	AR122119	AR122119	09/13/97	0149	7.73
05	AR123219	AR123219	09/13/97	0243	7.73
06	AR124219	AR124219	09/13/97	0337	7.73
07	AR124819	AR124819	09/13/97	0431	7.73
08	AR125419	AR125419	09/13/97	0525	7.73
09	TOXAPH19	TOXAPH19	09/13/97	0619	7.73
10	INDAL92	INDAL92	09/13/97	0713	7.73
11	INDBL92	INDBL92	09/13/97	0807	7.73
12	INDAM9E	INDAM9E	09/13/97	0900	7.74
13	INDBM9E	INDBM9E	09/13/97	0954	7.73
	INDAH92	INDAH92	09/13/97	1048	7.73
15	INDBH92	INDBH92	09/13/97	1142	7.73
16	PIBLK2B	PIBLK2B	09/13/97	1236	7.73
17	PEM2Q	PEM2Q	09/13/97	1330	7.73
18	PIBLK3B	PIBLK3B	09/19/97	2012	7.72
19	PEM3G	PEM3G	09/19/97	2106	7.73
20	PBLK01	PBLK01	09/19/97	2200	7.73
21	ECC1T1W	970836701	09/19/97	2254	7.72
22	ECC1T1WMS	970836701MS	09/19/97	2348	7.72
23	ECC1T1WMSD	970836701MSD	09/20/97	0042	7.71
24	ECC1T1WD	970836702	09/20/97	0135	7.71
25	PLCS01	PLCS01	09/20/97	0229	7.73
26	ZZZZZ	ZZZZZ	09/20/97	0323	
27	ZZZZZ	ZZZZZ	09/20/97	0417	
28	ZZZZZ	ZZZZZ	09/20/97	0511	
29	ZZZZZ	ZZZZZ	09/20/97	0605	
30	PIBLK3C	PIBLK3C	09/20/97	0659	7.73
31	INDAM9P	INDAM9P	09/20/97	0753	7.73
32	INDBM9P	INDBM9P	09/20/97	0847	7.72

QC LIMITS:

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8LCD  
LOW CONC. WATER PESTICIDE ANALYTICAL SEQUENCE

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

GC Column: RTX-35 ID: 0.53 (mm) Init. Calib. Date(s): 08/28/97 08/29/97

Instrument ID: HP5890P3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC89	RESC89	08/28/97	2127	12.02	40.04
02	PEM1I	PEM1I	08/28/97	2222	12.02	40.03
03	AR166016	AR166016	08/28/97	2318	12.02	40.03
04	AR122116	AR122116	08/29/97	0014	12.02	40.03
05	AR123216	AR123216	08/29/97	0109	12.02	40.04
06	AR124216	AR124216	08/29/97	0205	12.02	40.04
07	AR124816	AR124816	08/29/97	0300	12.02	40.03
08	AR125416	AR125416	08/29/97	0356	12.01	40.03
09	TOXAPH16	TOXAPH16	08/29/97	0452	12.02	40.03
10	INDAL89	INDAL89	08/29/97	0548	12.02	40.03
11	INDBL89	INDBL89	08/29/97	0643	12.02	40.03
12	INDAM8Q	INDAM8Q	08/29/97	0739	12.01	40.02
13	INDBM8Q	INDBM8Q	08/29/97	0834	12.01	40.02
	INDAH89	INDAH89	08/29/97	0930	12.01	40.03
15	INDBH89	INDBH89	08/29/97	1026	12.01	40.02
16	PIBLK9N	PIBLK9N	08/29/97	1121	12.02	40.03
17	PEM1J	PEM1J	08/29/97	1411	12.01	40.03
18	PIBLK1N	PIBLK1N	09/08/97	1344	12.01	40.03
19	PEM2D	PEM2D	09/08/97	1440	12.01	40.01
20	PBLK01	PBLK01	09/08/97	1535	12.01	40.02
21	ECC1T1W	970836701	09/08/97	1631	12.01	40.01
22	ECC1T1WMS	970836701MS	09/08/97	1726	12.02	40.02
23	ECC1T1WMSD	970836701MSD	09/08/97	1822	12.02	40.03
24	ECC1T1WD	970836702	09/08/97	1918	12.02	40.03
25	PLCS01	PLCS01	09/08/97	2013	12.02	40.04
26	ZZZZZ	ZZZZZ	09/08/97	2109		
27	ZZZZZ	ZZZZZ	09/08/97	2204		
28	ZZZZZ	ZZZZZ	09/08/97	2300		
29	ZZZZZ	ZZZZZ	09/08/97	2356		
30	ZZZZZ	ZZZZZ	09/09/97	0051		
31	PIBLK1P	PIBLK1P	09/09/97	0147	12.02	40.03
32	INDAM8Y	INDAM8Y	09/09/97	0241	12.01	40.03

QC LIMITS:

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8LCD  
LOW CONC. WATER PESTICIDE ANALYTICAL SEQUENCE

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226 SDG No.: 08367

GC Column: RTX-35 ID: 0.53 (mm) Init. Calib. Date(s): 08/28/97 08/29/97

Instrument ID: HP5890P3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	TCX: 12.01	DCB: 40.03			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 INDBM8Y	INDBM8Y	09/09/97	0336	12.01	40.03
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS:

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

9LCA  
LOW CONC. WATER PESTICIDE FLORISIL CARTRIDGE CHECK

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Florisil Cartridge Lot Number: 172AC Date of Analysis: 01/16/96

GC Column(1): RTX-35 ID: 0.53 (mm) GC Column(2): DB-1701 ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (ng)	SPIKE RECOVERED (ng)	% REC #	QC LIMITS
alpha-BHC	20	19	95	80-120
gamma-BHC (Lindane)	20	19	95	80-120
Heptachlor	20	19	95	80-120
Endosulfan I	20	19	95	80-120
Dieldrin	40	38	95	80-120
Endrin	40	36	90	80-120
4,4'-DDD	40	39	98	80-120
4,4'-DDT	40	38	95	80-120
Methoxychlor	200	200	100	80-120
Tetrachloro-m-xylene	20	19	95	80-120
Decachlorobiphenyl	-40	40	100	80-120

# Column to be used to flag recovery with an asterisk.

\* Values outside of QC limits.

THIS CARTRIDGE LOT APPLIES TO THE FOLLOWING SAMPLES, BLANKS, MS, AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01 PBLK01	PBLK01	09/08/97	09/19/97
02 ECC1T1W	970836701	09/08/97	09/19/97
03 ECC1T1WMS	970836701MS	09/08/97	09/19/97
04 ECC1T1WMSD	970836701MSD	09/08/97	09/20/97
05 ECC1T1WD	970836702	09/08/97	09/20/97
06 PLCS01	PLCS01	09/08/97	09/20/97
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			

10LCA  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

ECC1T1WMS

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MS

Date(s) Analyzed: 09/08/97 09/19/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	17.27	17.22	17.32	0.046	
	2	12.68	12.65	12.75	0.048	4.3
Heptachlor epoxide	1	23.14	23.07	23.21	0.11	
	2	20.17	20.11	20.25	0.058	89.6
Dieldrin	1	25.70	25.63	25.77	0.16	
	2	25.51	25.45	25.59	0.12	33.3
4,4'-DDE	1	25.40	25.33	25.47	0.21	
	2	24.64	24.57	24.71	0.12	75.0
Endrin	1	26.92	26.85	26.99	0.18	
	2	26.86	26.81	26.95	0.15	20.0
Endosulfan sulfate	1	29.12	29.04	29.18	0.070	
	2	34.11	34.05	34.19	0.049	29.2
gamma-Chlordane	1	23.92	23.85	23.99	0.086	
	2	23.19	23.12	23.26	0.062	38.7
	1					
	2					

10LCA  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

ECC1T1WMSD

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MSD

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
gamma-BHC (Lindane)	1	17.27	17.22	17.32	0.050	
	2	12.68	12.65	12.75	0.049	2.0
Heptachlor epoxide	1	23.13	23.07	23.21	0.15	
	2	20.17	20.11	20.25	0.064	134.4
Dieldrin	1	25.70	25.63	25.77	0.19	
	2	25.51	25.45	25.59	0.13	46.2
4,4'-DDE	1	25.40	25.33	25.47	0.26	
	2	24.64	24.57	24.71	0.10	160.0
Endrin	1	26.93	26.85	26.99	0.29	
	2	26.87	26.81	26.95	0.15	93.3
Endosulfan sulfate	1	29.13	29.04	29.18	0.13	
	2	34.12	34.05	34.19	0.063	106.3
gamma-Chlordane	1	23.92	23.85	23.99	0.097	
	2	23.19	23.12	23.26	0.068	42.6
	1					
	2					

10LCA  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

ECC1T1WMSD

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MSD

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	17.27	17.22	17.32	0.050	
	2	12.68	12.65	12.75	0.049	2.0
Heptachlor epoxide	1	23.13	23.07	23.21	0.15	
	2	20.17	20.11	20.25	0.064	134.4
Dieldrin	1	25.70	25.63	25.77	0.19	
	2	25.51	25.45	25.59	0.13	46.2
4,4'-DDE	1	25.40	25.33	25.47	0.26	
	2	24.64	24.57	24.71	0.10	160.0
Endrin	1	26.93	26.85	26.99	0.29	
	2	26.87	26.81	26.95	0.15	93.3
Endosulfan sulfate	1	29.13	29.04	29.18	0.13	
	2	34.12	34.05	34.19	0.063	106.3
gamma-Chlordane	1	23.92	23.85	23.99	0.097	
	2	23.19	23.12	23.26	0.068	42.6
	1					
	2					

10LCA  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PLCS01

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PLCS01

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	17.27	17.22	17.32	0.046	
	2	12.68	12.65	12.75	0.030	53.3
Heptachlor epoxide	1	23.15	23.07	23.21	0.077	
	2	20.16	20.11	20.25	0.058	32.8
Dieldrin	1	25.70	25.63	25.77	0.17	
	2	25.50	25.45	25.59	0.12	41.7
4,4'-DDE	1	25.41	25.33	25.47	0.18	
	2	24.64	24.57	24.71	0.13	38.5
Endrin	1	26.93	26.85	26.99	0.18	
	2	26.86	26.81	26.95	0.13	38.5
Endosulfan sulfate	1	29.12	29.04	29.18	0.029	
	2	34.11	34.05	34.19	0.020	45.0
Endrin ketone	1	31.87	31.82	31.96	0.0088	
	2	36.02	35.98	36.12	0.0089	1.1
Endrin aldehyde	1	28.58	28.51	28.65	0.0037	
	2	32.47	32.40	32.54	0.0062	67.6

10LCA  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTA Contract: SOW 10/92

PLCS01

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PLCS01

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35 ID: 0.53 (mm) GC Column(2):DB-1701 ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%D
gamma-Chlordane	1	23.92	23.85	23.99	0.085	
	2	23.18	23.12	23.26	0.064	32.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10LCB  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ECC1T1WD

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836702

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Toxaphene	1	26.45	26.42	26.56	1.60	2.40	100.0
	2	29.49	29.47	29.61	1.80		
	3	29.95	29.86	30.00	3.70		
	4	—	—	—	—		
	5	—	—	—	—		
COLUMN 1	1	30.67	30.60	30.74	1.40	1.50	60.0
	2	31.69	31.66	31.80	2.30		
	3	33.23	33.14	33.28	0.89		
	4	—	—	—	—		
	5	—	—	—	—		
COLUMN 2	1	—	—	—	—	100.0	100.0
	2	—	—	—	—		
	3	—	—	—	—		
	4	—	—	—	—		
	5	—	—	—	—		
COLUMN 1	1	—	—	—	—	100.0	100.0
	2	—	—	—	—		
	3	—	—	—	—		
	4	—	—	—	—		
	5	—	—	—	—		
COLUMN 2	1	—	—	—	—	100.0	100.0
	2	—	—	—	—		
	3	—	—	—	—		
	4	—	—	—	—		
	5	—	—	—	—		

At least 3 peaks are required for identification of multicomponent analytes

page 01 of 01

FORM X LCP-2

10/92

10LCB  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

ECC1T1W

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701

Date(s) Analyzed: 09/08/97 09/19/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Toxaphene	1	26.44	26.42	26.56	1.30	2.60	
	2	29.50	29.47	29.61	4.30		
	3	29.95	29.86	30.00	2.20		
	4						
	5						
COLUMN 1	1	30.66	30.60	30.74	0.90	0.87	198.8
	2	31.81	31.66	31.80	1.10		
	3	33.24	33.14	33.28	0.64		
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

page 01 of 01

10LCB  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ECC1T1WMS

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MS

Date(s) Analyzed: 09/08/97 09/19/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
<b>Toxaphene</b>	1	26.56	26.42	26.56			
	2	29.50	29.47	29.61	0.86		
	3	29.95	29.86	30.00	1.50		
	4	—	—	—			
	5	—	—	—		1.50	
<b>COLUMN 1</b>	1	30.68	30.60	30.74	0.87		
	2	31.70	31.66	31.80	1.60		
	3	33.23	33.14	33.28	0.49		
	4	—	—	—			
	5	—	—	—		0.99	
<b>COLUMN 2</b>	1	—	—	—			
	2	—	—	—			
	3	—	—	—			
	4	—	—	—			
	5	—	—	—			
<b>COLUMN 1</b>	1	—	—	—			
	2	—	—	—			
	3	—	—	—			
	4	—	—	—			
	5	—	—	—			
<b>COLUMN 2</b>	1	—	—	—			
	2	—	—	—			
	3	—	—	—			
	4	—	—	—			
	5	—	—	—			
<b>COLUMN 1</b>	1	—	—	—			
	2	—	—	—			
	3	—	—	—			
	4	—	—	—			
	5	—	—	—			
<b>COLUMN 2</b>	1	—	—	—			
	2	—	—	—			
	3	—	—	—			
	4	—	—	—			
	5	—	—	—			

At least 3 peaks are required for identification of multicomponent analytes

page 01 of 01

FORM X LCP-2

10/92

10LCB  
LOW CONC. WATER PESTICIDE IDENTIFICATION SUMMARY  
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

ECC1T1WMSD

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MSD

Date(s) Analyzed: 09/08/97 09/20/97

Instrument ID (1): HP5890P3

Instrument ID (2): HP5890P2

GC Column(1):RTX-35

ID: 0.53 (mm)

GC Column(2):DB-1701

ID: 0.53 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Toxaphene	1	26.45	26.42	26.56	2.00	2.50	66.7
	2	29.49	29.47	29.61	1.80		
	3	29.95	29.86	30.00	3.70		
	4						
	5						
COLUMN 1	1	30.68	30.60	30.74	1.40	1.50	66.7
	2	31.70	31.66	31.80	2.20		
	3	33.24	33.14	33.28	0.72		
	4						
	5						
COLUMN 2	1					1.50	66.7
	2						
	3						
	4						
	5						
COLUMN 1	1					1.50	66.7
	2						
	3						
	4						
	5						
COLUMN 2	1					1.50	66.7
	2						
	3						
	4						
	5						
COLUMN 1	1					1.50	66.7
	2						
	3						
	4						
	5						
COLUMN 2	1					1.50	66.7
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes  
page 01 of 01

## PESTICIDE STANDARDS

COLUMN: DB-1701

INSTRUMENT: HP5890P2

1 ul injected

## COMPOUND

## MG INJECTED

## RESC:

gamma-Chlordane	0.010
Endosulfan I	0.010
p,p'-DDE	0.020
Dieldrin	0.020
Endosulfan sulfate	0.020
Endrin ketone	0.020
Methoxychlor	0.100
Tetrachloro-m-xylene	0.020
Decachlorobiphenyl	0.020

## PEM:

gamma-BHC	0.010
alpha-BHC	0.010
4,4'-DDT	0.100
beta-BHC	0.010
Endrin	0.050
Methoxychlor	0.250
Tetrachloro-m-xylene	0.020
Decachlorobiphenyl	0.020

AR1660	(combination of AR1016 & AR1260)	0.100 each/0.200 total
AR1221		0.200
AR1232		0.100
AR1242		0.100
AR1248		0.100
AR1254		0.100
TOXAPH		0.500

## PESTICIDE STANDARDS

COLUMN: DB-1701

INSTRUMENT: HP5890P2

1 ul injected

## COMPOUND

## NG INJECTED

	LOW	MEDIUM	HIGH
--	-----	--------	------

## INDA:

alpha-BHC	0.005	0.020	0.080
Heptachlor	0.005	0.020	0.080
gamma-BHC	0.005	0.020	0.080
Endosulfan I	0.005	0.020	0.080
Dieldrin	0.010	0.040	0.160
Erdrin	0.010	0.040	0.160
4,4'-DDD	0.010	0.040	0.160
4,4'-DDT	0.010	0.040	0.160
Methoxychlor	0.050	0.200	0.800
Tetrachloro-m-xylene	0.005	0.020	0.080
Decachlorobiphenyl	0.010	0.040	0.160

## INDB:

beta-BHC	0.005	0.020	0.080
delta-BHC	0.005	0.020	0.080
Aldrin	0.005	0.020	0.080
Heptachlor epoxide	0.005	0.020	0.080
alpha-Chlordane	0.005	0.020	0.080
gamma-Chlordane	0.005	0.020	0.080
4,4'-DDE	0.010	0.040	0.160
Endosulfan sulfate	0.010	0.040	0.160
Endrin aldehyde	0.010	0.040	0.160
Endrin ketone	0.010	0.040	0.160
Endosulfan II	0.010	0.040	0.160
Tetrachloro-m-Xylene	0.005	0.020	0.080
Decachlorobiphenyl	0.010	0.040	0.160

## IEA Pesticide Standard Report

Sample Name : RESC92 Report No : 74.01  
 Result File : /RESULT/P2091297\_004.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : External STD  
 Run Time : 44.00 Mins. Injected on 2308 12Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 1/ 4 Bottle no. : 4

x Dil-Fact  
 100.00

Run Status : RunStatusOK

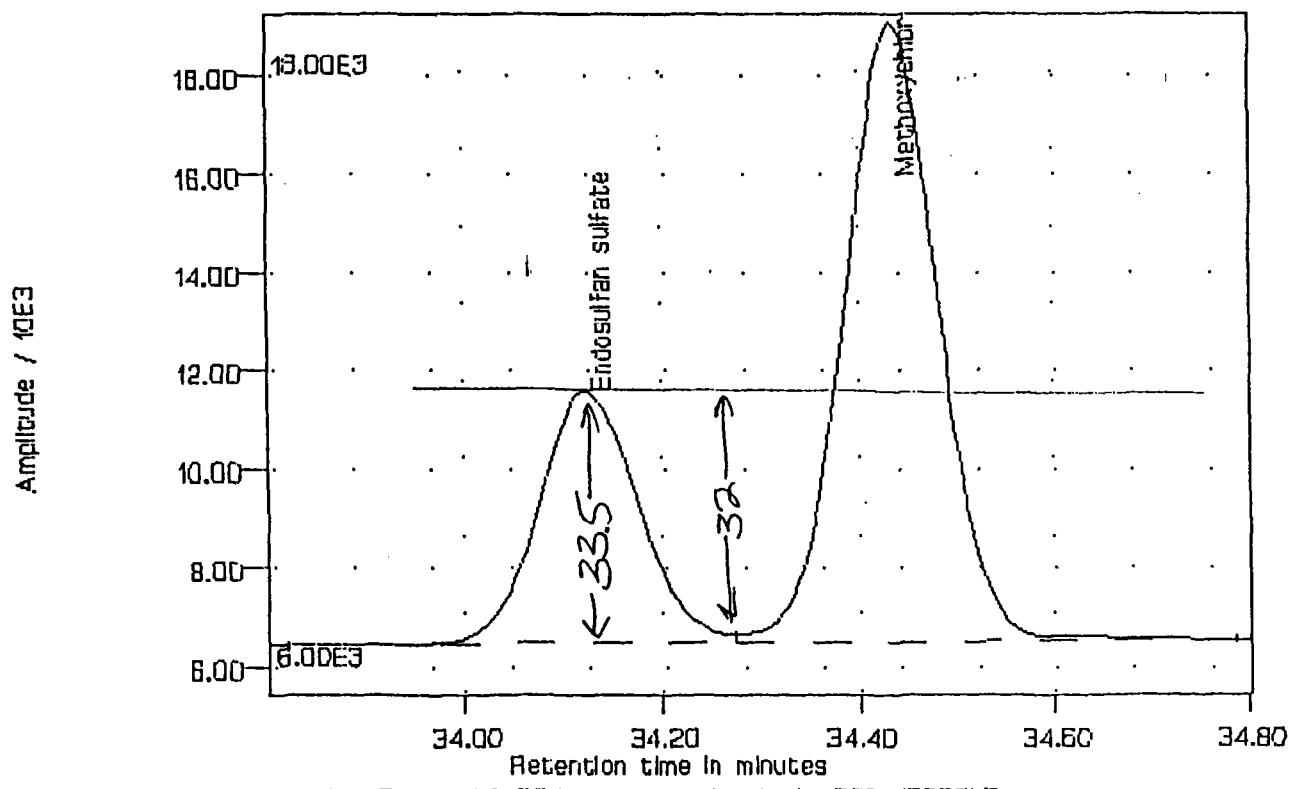
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.065	2767	BB	0.00000	
2	7.73	7.73	.062	147218	BB	.17653	Tetrachloro-m-xylene
3	9.31		.066	1546	BB	0.00000	
4	16.99		.146	3647	BB	0.00000	
5	22.56	22.58	.180	88853	BB	.09824	Endosulfan I
6	23.20	23.19	.170	94230	BB	.09783	gamma-Chlordane
7	24.65	24.64	.155	127882	BB	.20257	4,4'-DDE
8	25.51	25.52	.148	151094	BB	.18210	Dieldrin
9	30.07	30.06	.126	2264	BV	.00293	Endosulfan II
10	31.49		.130	7528	BV	0.00000	
11	31.84		.126	1949	PB	0.00000	
12	32.88		.126	3550	BB	0.00000	
13	33.64		.130	2722	BV	0.00000	
14	34.12	34.11	.116	142413	UU	.21190	Endosulfan sulfate
15	34.43	34.43	.111	334759	UU	.82400	Methoxychlor
16	34.95		.137	3689	UU	0.00000	
17	36.05	36.04	.115	125604	UU	.19950	Endrin ketone
18	36.44		.179	12656	PB	0.00000	
19	39.31		1.257	29839	PV	0.00000	
20	39.99	#39.99	.134	180388	VB	.17782	Decachlorobiphenyl

Total Area : 1464598 Total PPB : 2.173

Report Time : 1507 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_004.RES

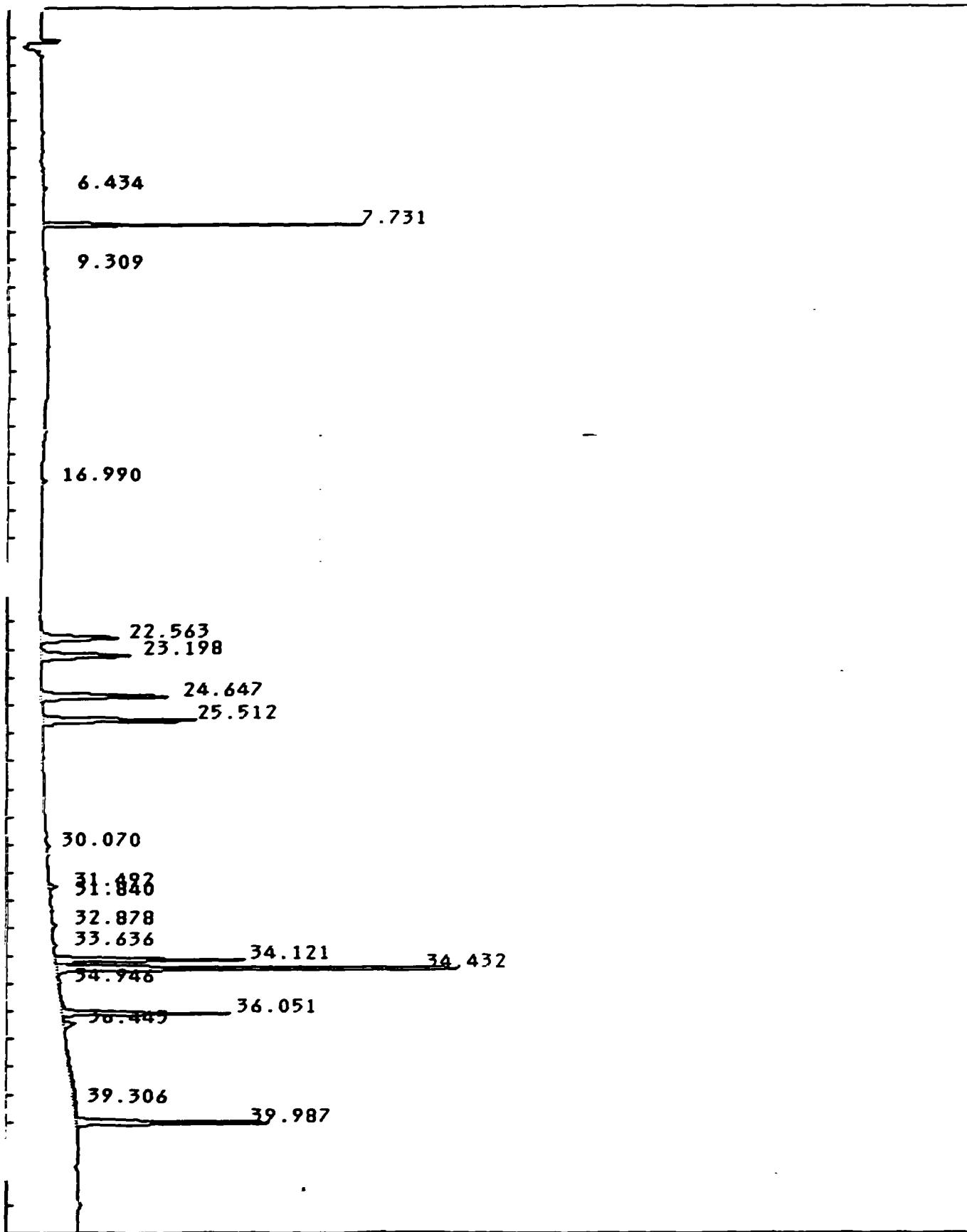
$\frac{32}{33.5} \Rightarrow 95.5\%$

Sample : RIESC92 Injected : FRI SEP 12, 1997 11:08:19 PM



IEA Pesticide Standard Report

Sample Name : RESC92 Inj on 2308 12Sep1997  
Result File : /RESULT/P2091297\_004.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : PEM2P Report No : 75.01  
 Result File : /RESULT/P2091297\_005.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0002 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 1/ 5 Bottle no. : 5

% Dil-Fact  
100.00

Run Status : RunStatusOK

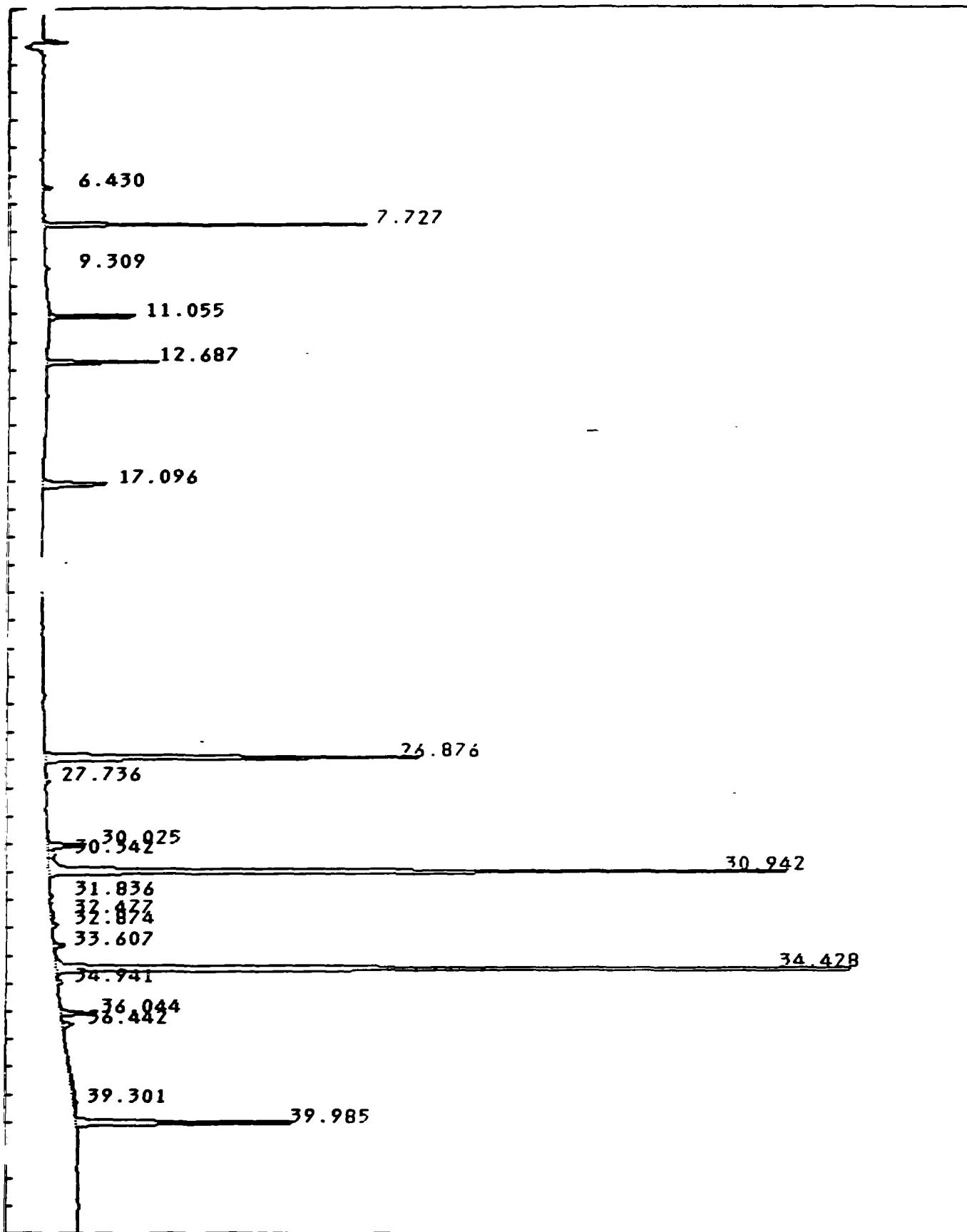
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.065	5642	BB	0.00000	
2	7.73	7.73	.062	149487	BB	.17925	Tetrachloro-m-xylene
4	9.31		.070	1958	BB	0.00000	
11	11.05	11.06	.068	57910	BB	.08775	alpha-BHC
5	12.69	12.70	.083	64320	BB	.09066	gamma-BHC (Lindane)
6	17.10	17.09	.137	56768	BB	.10732	beta-BHC
7	26.88	26.88	.136	325688	BB	.49480	Endrin
8	27.74		.171	4784	BB	0.00000	
9	30.03	30.02	.158	40996	BV	.06647	4,4'-DDD
10	30.34		.210	10572	VV	0.00000	
11	30.94	30.94	.120	567056	VV	1.05868	4,4'-DDT
12	31.84		.124	2776	BB	0.00000	
13	32.48	32.47	.273	5858	BV	.01435	Endrin aldehyde
14	32.87		.133	5405	BV	0.00000	
15	33.61		.149	10486	BV	0.00000	
16	34.43	34.43	.113	1001032	VV	2.46400	Methoxychlor
17	34.94		.112	3538	VV	0.00000	
18	36.04	36.04	.129	25340	PV	.04025	Endrin ketone
19	36.44		.185	12164	PV	0.00000	
20	39.30		.968	25430	VU	0.00000	
21	39.98	#39.99	.133	205575	BV	.20265	Decachlorobiphenyl

Total Area : 2582783 Total PPB : 4.806

Report Time : 1513 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_005.RES

IEA Pesticide Standard Report

Sample Name : PEM2P Inj on 0002 13Sep1997  
Result File : /RESULT/P2091297\_005.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR166019 Report No : 76.01  
 Result File : /RESULT/P2091297\_006.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890PZ  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0056 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 1 Bottle no. : 1

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.069	5590	BB	0.00000	
2	7.73	7.73	.062	175448	BB	.21038	Tetrachloro-m-xylene
3	8.52		.074	3591	VB	0.00000	
4	9.12		.079	3954	BV	0.00000	
5	9.69		.077	5580	BV	0.00000	
6	9.91		.074	26692	VB	0.00000	
7	10.65		.075	3785	BB	0.00000	
8	11.31		.080	62606	BV	0.00000	
9	11.74		.082	3636	VU	0.00000	
10	11.89		.089	4287	VU	0.00000	
11	12.08		.090	16765	VU	0.00000	
12	12.28		.090	22355	VB	0.00000	
13	12.87		.104	12820	BB	0.00000	
14	13.27		.105	93858	BB	0.00000	
15	13.78		.091	5523	BV	0.00000	
16	13.92		.118	42812	VB	0.00000	
17	14.48		.113	29420	BB	0.00000	
18	15.05		.119	36470	BV	0.00000	
19	15.15		.154	48726	VB	0.00000	
20	16.62		.175	47643	BV	0.00000	
21	17.26		.165	29376	VU	0.00000	
22	18.49		.160	6230	BV	0.00000	
23	19.66		.207	40303	BB	0.00000	
24	21.41		.196	37341	BV	0.00000	
25	24.31		.152	7198	BV	0.00000	
26	24.54		.159	15505	VB	0.00000	
27	25.11		.159	51255	BV	0.00000	
28	25.40		.138	7689	VU	0.00000	
29	25.59		.156	14853	VB	0.00000	
30	26.18		.148	82016	BB	0.00000	
31	26.89		.194	14112	BV	0.00000	
32	27.33		.144	14462	VU	0.00000	
33	27.76		.139	94864	PB	0.00000	
34	28.35		.116	17703	BV	0.00000	
35	28.49		.137	32552	VU	0.00000	
36	28.84		.159	39135	VB	0.00000	
37	29.56		.120	11610	BV	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	29.88		.186	115567	UU	0.00000	
39	30.11		.129	54815	UU	0.00000	
1	30.37		.129	30989	VB	0.00000	
-1	31.21		.122	7438	BV	0.00000	
42	31.85		.126	64698	UU	0.00000	
43	32.12		.125	29550	UU	0.00000	
44	32.35		.122	14565	UU	0.00000	
45	33.04		.120	15856	BV	0.00000	
46	33.42		.128	115117	PB	0.00000	
47	34.65		.094	2466	BV	0.00000	
48	34.92		.115	23150	UU	0.00000	
49	35.18		.140	83340	VB	0.00000	
50	36.45		.190	9299	BV	0.00000	
51	36.89		.135	12616	UU	0.00000	
52	38.11		.122	26847	PV	0.00000	
53	39.30		.198	11752	VB	0.00000	
54	39.99	#39.99	.132	227527	BB	.22429	Decachlorobiphenyl

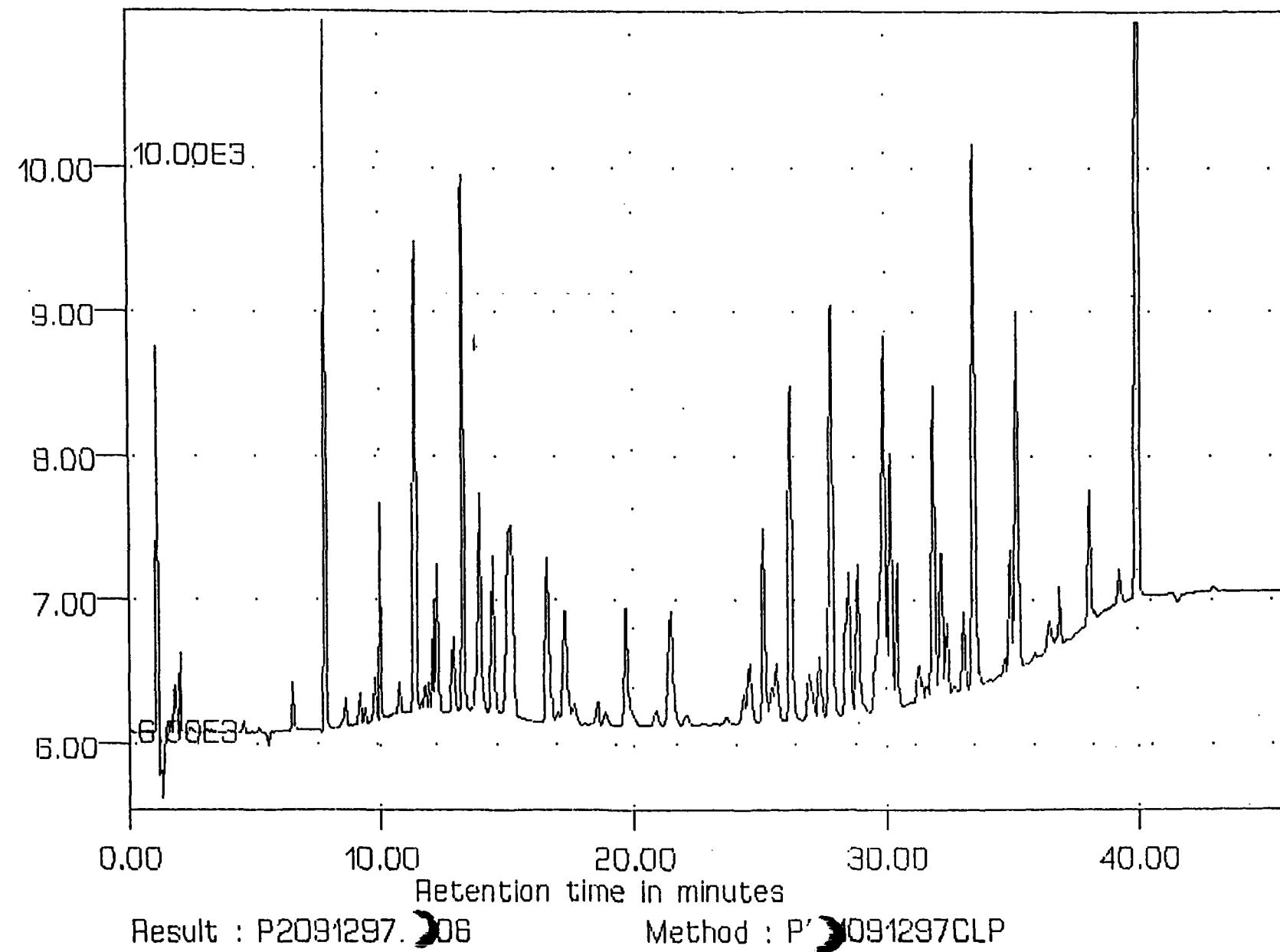
Total Area : 2013359 Total PPB : .435

Report Time : 1518 19Sep1997  
Method : /METHOD/P2M091297CLP.MTH  
Result File : /RESULT/P2091297\_006.RES

Sample : AR166019

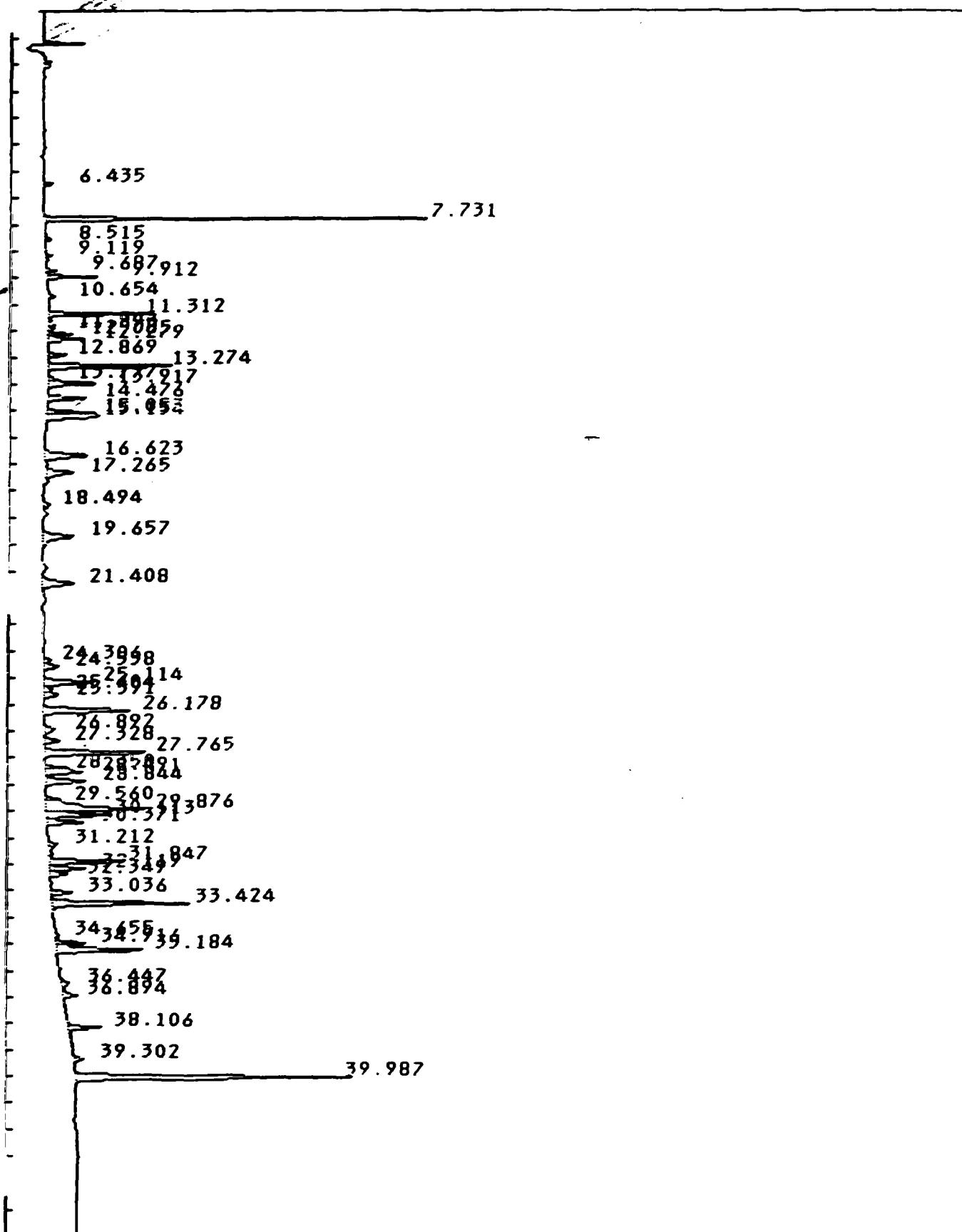
Inj. On :

0056 13Sep1997



## IEA Pesticide Standard Report

Sample Name : AR166019 Inj on 0056 13Sep1997  
Result File : /RESULT/P2091297\_006.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR122119 Report No : 77.01  
 Result File : /RESULT/P2091297\_007.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890F2  
 Calculation : External STD  
 Run Time : 46.00 Mins. Injected on 0149 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 2 Bottle no. : 2

% Dil-Fact  
100.00

Run Status : RunStatusOK

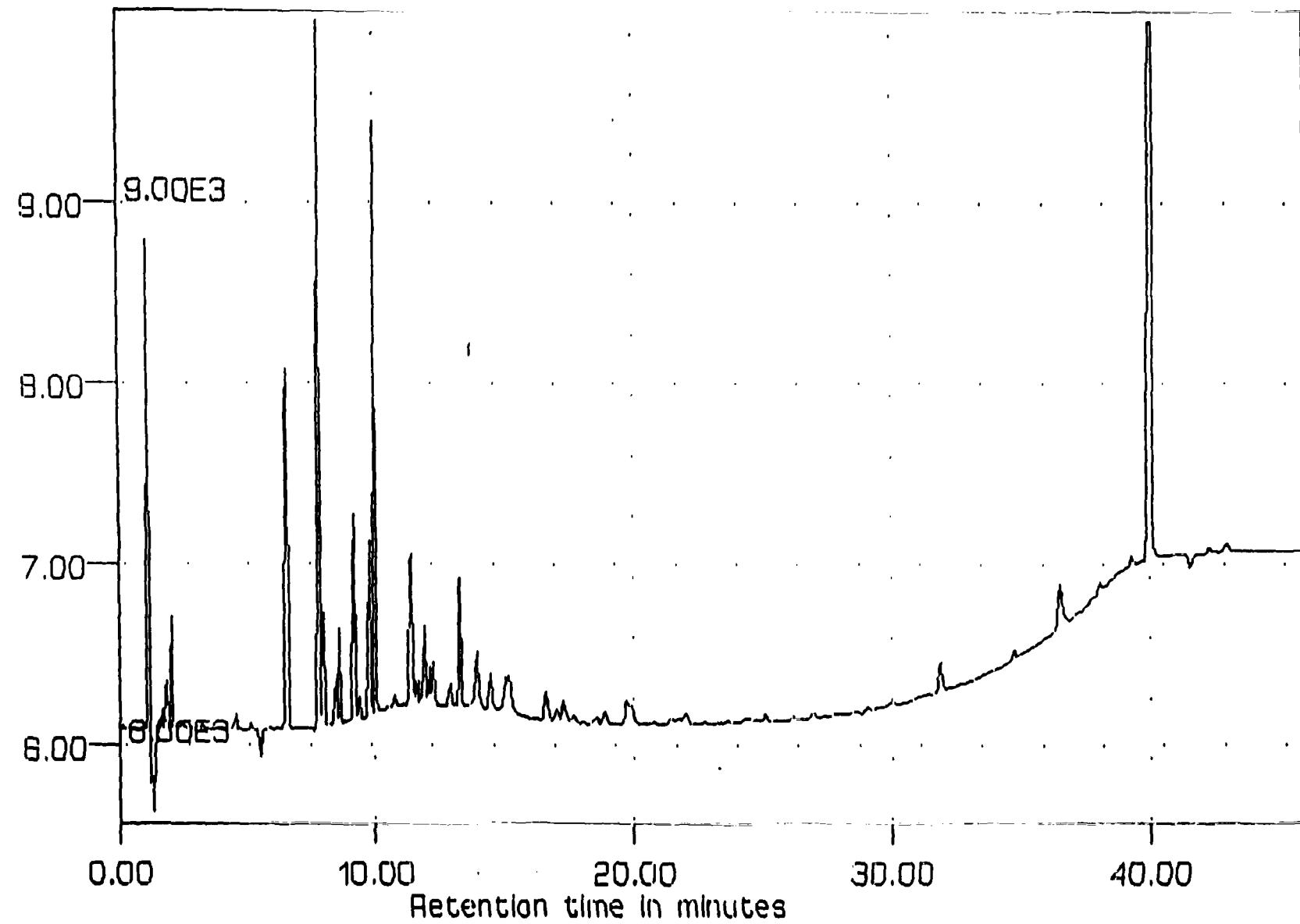
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.46		.072	34678	BB	0.00000	
2	7.73	7.73	.062	183595	BV	.22015	Tetrachloro-m-xylene
3	7.92		.076	11403	VB	0.00000	
4	8.37		.067	3770	BV	0.00000	
5	8.51		.074	9343	VB	0.00000	
6	9.11		.079	21553	BV	0.00000	
7	9.68		.074	17302	BV	0.00000	
8	9.91		.075	58729	VB	0.00000	
9	11.31		.079	15903	BV	0.00000	
10	11.89		.089	9329	VU	0.00000	
11	12.09		.101	5073	VU	0.00000	
12	12.27		.091	5276	VB	0.00000	
13	13.27		.104	17759	BB	0.00000	
14	13.91		.130	9541	BB	0.00000	
15	14.47		.112	5098	BB	0.00000	
16	15.15		.272	12795	BB	0.00000	
17	16.62		.169	6211	BV	0.00000	
18	19.69		.323	10275	BB	0.00000	
19	31.84		.122	4405	BB	0.00000	
20	36.45		.169	9382	BB	0.00000	
21	38.05		.247	4020	BV	0.00000	
22	39.31		.571	8118	VB	0.00000	
23	39.99	#39.99	.129	239211	BB	.23580	Decachlorobiphenyl

Total Area : 702768 Total PPB : .456

Report Time : 1527 19Sep1997  
 Method : /METHOD/P2M091297CLP.MTH  
 Result File : /RESULT/P2091297\_007.RES

Sample : AR122119

Inj. Dn : 0149 13Sep1997

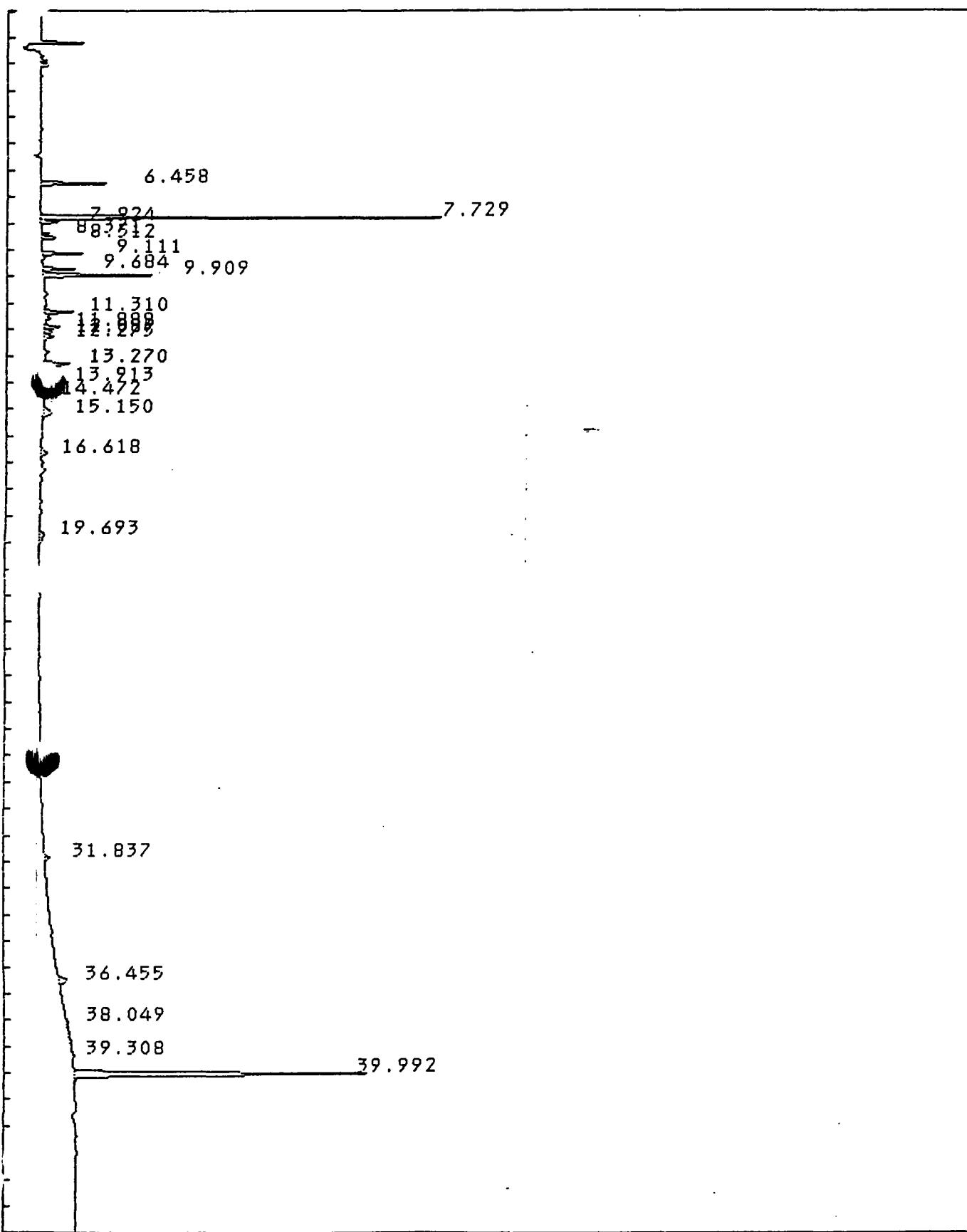


Result : P2091297\_007

Method : P2M091297CLP

IEA Pesticide Standard Report

Sample Name : AR122119 Inj on 0149 13Sep1997  
Result File : /RESULT/P2091297\_007.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



**IEA Pesticide Standard Report**

**Sample Name** : AR123219 **Report No :** 78.01  
**Result File** : /RESULT/P2091297\_008.RES  
**Column Type** : DB-1701 30 Meter, 0.53mm ID **Inj. Vol. :** 1 uL  
**Instrument** : HP5890P2  
**Calculation** : ExternalSTD  
**Run Time** : 46.00 Mins. Injected on 0243 13Sep1997  
**Sequence File** : /SEQUENCE/P2091297CLP.SEQ  
**Subseq/Sample** : 2/ 3 **Bottle no. :** 3

**# Dil-Fact**  
100.00

**Run Status** : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.46		.079	14654	BB	0.00000	
2	7.73	7.73	.062	153717	BV	.18432	Tetrachloro-m-xylene
3	7.93		.077	3962	VB	0.00000	
4	8.52		.074	4094	VB	0.00000	
5	9.12		.079	7932	BV	0.00000	
6	9.69		.075	7537	BV	0.00000	
7	9.91		.074	30219	VB	0.00000	
8	11.31		.082	30087	BV	0.00000	
9	11.90		.089	5432	UU	0.00000	
10	12.09		.094	8323	UU	0.00000	
11	12.28		.090	10415	VB	0.00000	
2	12.87		.101	5702	BB	0.00000	
3	13.28		.105	41846	BB	0.00000	
14	13.92		.132	22318	BB	0.00000	
15	14.48		.112	12939	BB	0.00000	
16	15.05		.118	14649	BV	0.00000	
17	15.15		.153	19834	VB	0.00000	
18	16.63		.172	20525	BV	0.00000	
19	17.26		.153	13325	UU	0.00000	
20	18.84		.170	7864	VB	0.00000	
21	19.71		.326	31701	BB	0.00000	
22	21.98		.339	15803	VS	0.00000	
23	31.84		.122	4983	BB	0.00000	
24	36.46		.156	4359	BB	0.00000	
25	39.31		.495	6452	BB	0.00000	
26	40.00	#39.99	.128	209446	BB	.20646	Decachlorobiphenyl

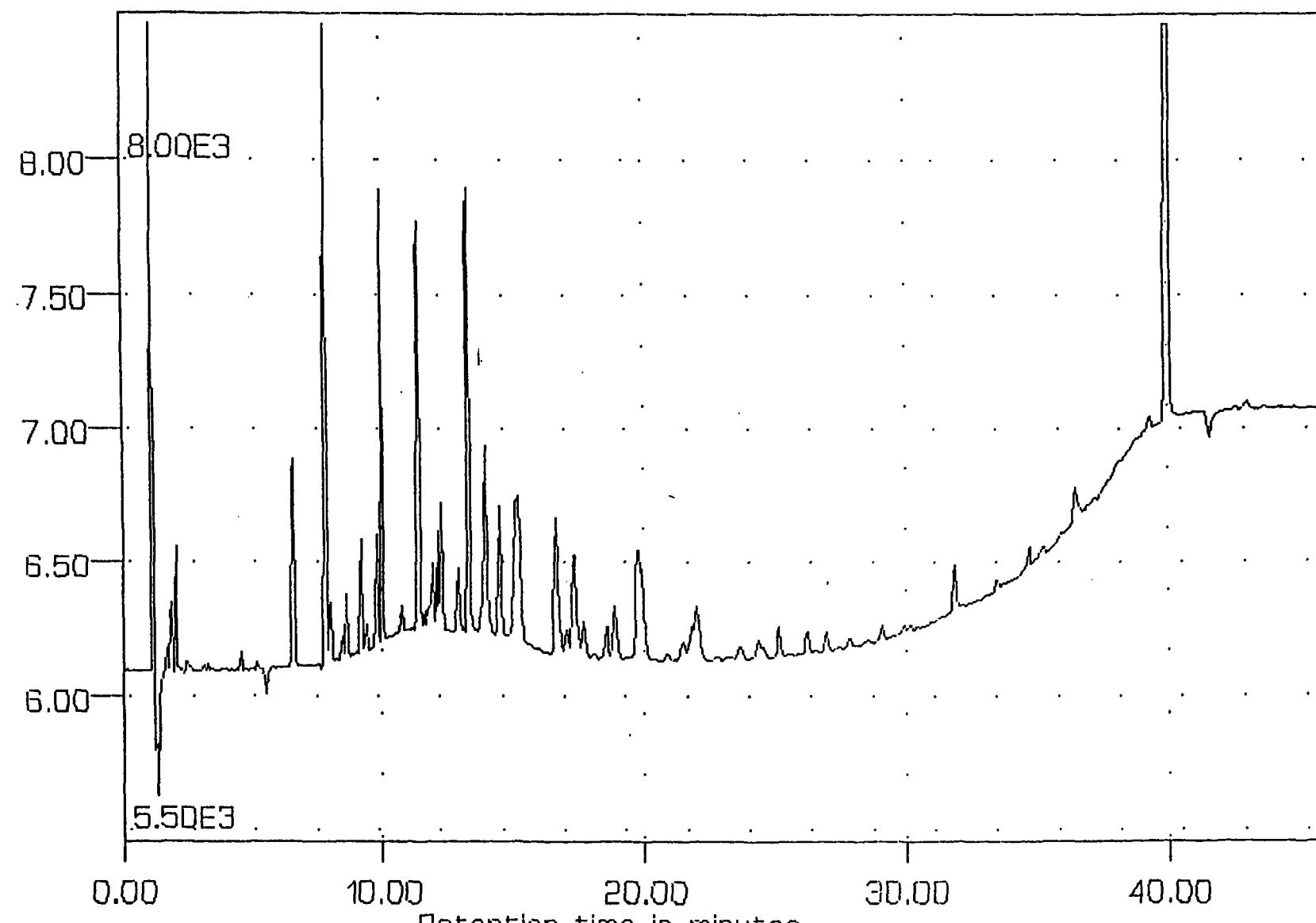
**Total Area** : 708113 **Total PPB** : .391

**Report Time** : 1532 19Sep1997  
**Method** : /METHOD/P2M091297CLP.MTH  
**Result File** : /RESULT/P2091297\_008.RES

Sample : AR123219

Inj. On :

0243 13Sep1997

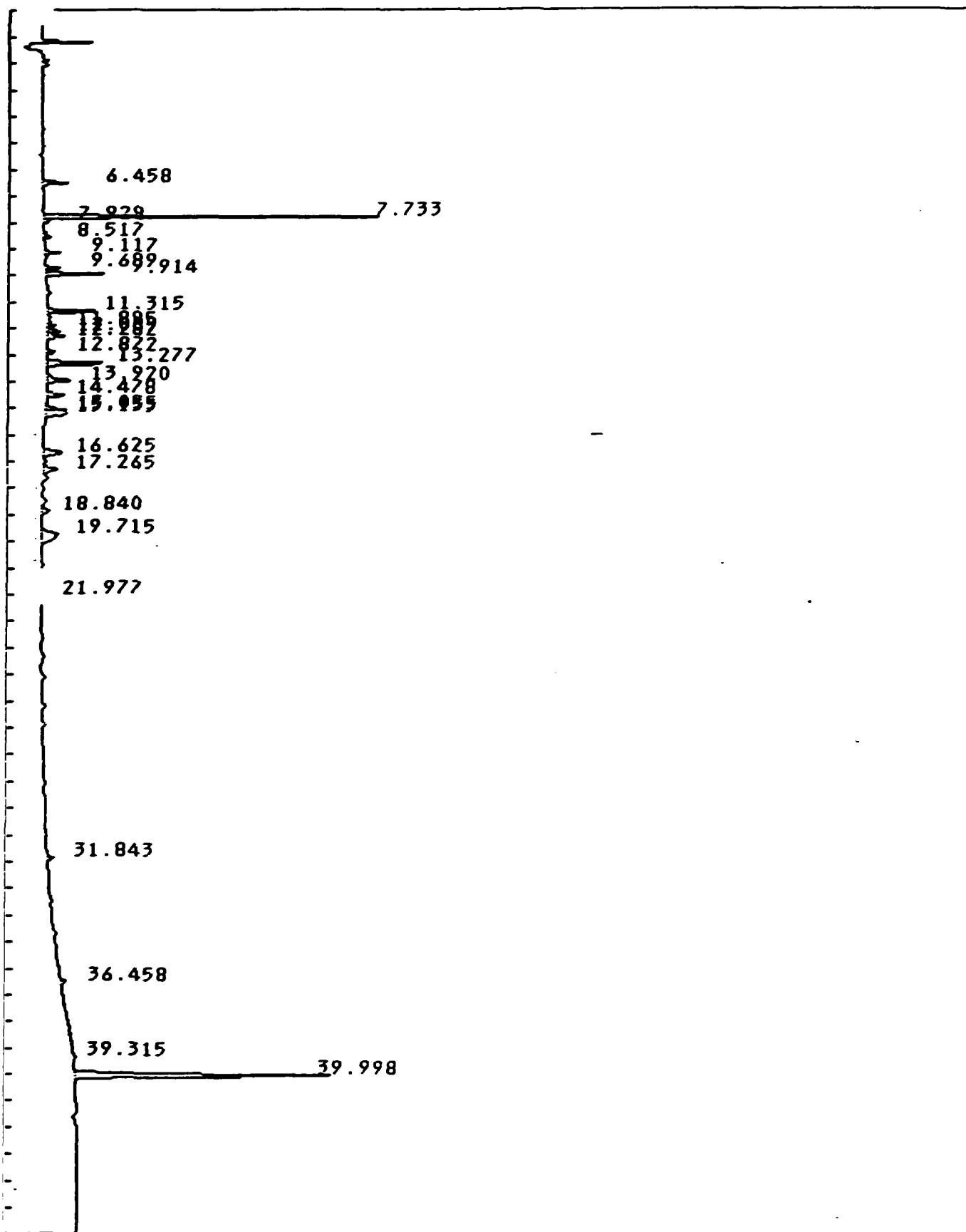


Result : P2091297\_208

Method : P2091297CLP

IEA Pesticide Standard Report

Sample Name : AR123219 Inj on 0243 13Sep1997  
Result File : /RESULT/P2091297\_008.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR124219 Report No : 79.02  
 Result File : /RESULT/P2091297\_009.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0337 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 4 Bottle no. : 4

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.44		.071	5829	BB	0.00000	
2	7.73	7.73	.062	177822	BB	.21323	Tetrachloro-m-xylene
	8.51		.074	2968	VB	0.00000	
	9.12		.078	3728	BV	0.00000	
5	9.69		.078	4914	BV	0.00000	
6	9.91		.074	21679	VB	0.00000	
7	10.65		.075	2404	BB	0.00000	
8	11.31		.080	41050	BV	0.00000	
9	11.89		.089	3536	VV	0.00000	
10	12.08		.091	11268	VV	0.00000	
11	12.28		.090	14582	VB	0.00000	
2	12.87		.102	8134	BB	0.00000	
13	13.27		.106	60544	BB	0.00000	
14	13.77		.091	3567	BV	0.00000	
15	13.91		.119	28173	VB	0.00000	
16	14.47		.113	18887	BB	0.00000	
17	15.04		.120	24301	BV	0.00000	
18	15.15		.150	30934	VB	0.00000	
19	16.61		.178	34189	BV	0.00000	
	17.25		.175	25858	VV	0.00000	
21	17.61		.152	7041	VB	0.00000	
22	18.48		.163	6945	BV	0.00000	
23	18.83		.170	13516	VB	0.00000	
24	19.69		.188	31877	BV	0.00000	
25	19.85		.167	22761	VB	0.00000	
26	21.39		.182	6679	BV	0.00000	
27	21.74		.224	11318	VV	0.00000	
28	21.96		.218	17436	VB	0.00000	
29	24.29		.078	1522	BV	0.00000	
30	25.08		.150	9629	BB	0.00000	
31	26.16		.155	5568	BV	0.00000	
32	26.87		.146	7096	BB	0.00000	
33	29.02		.135	5173	BB	0.00000	
34	31.83		.122	5245	BB	0.00000	
35	36.44		.104	4804	BB	0.00000	
36	39.30		.538	7706	BB	0.00000	
37	39.98 #39.99		.130	238266	BB	.23487	Decachlorobiphenyl

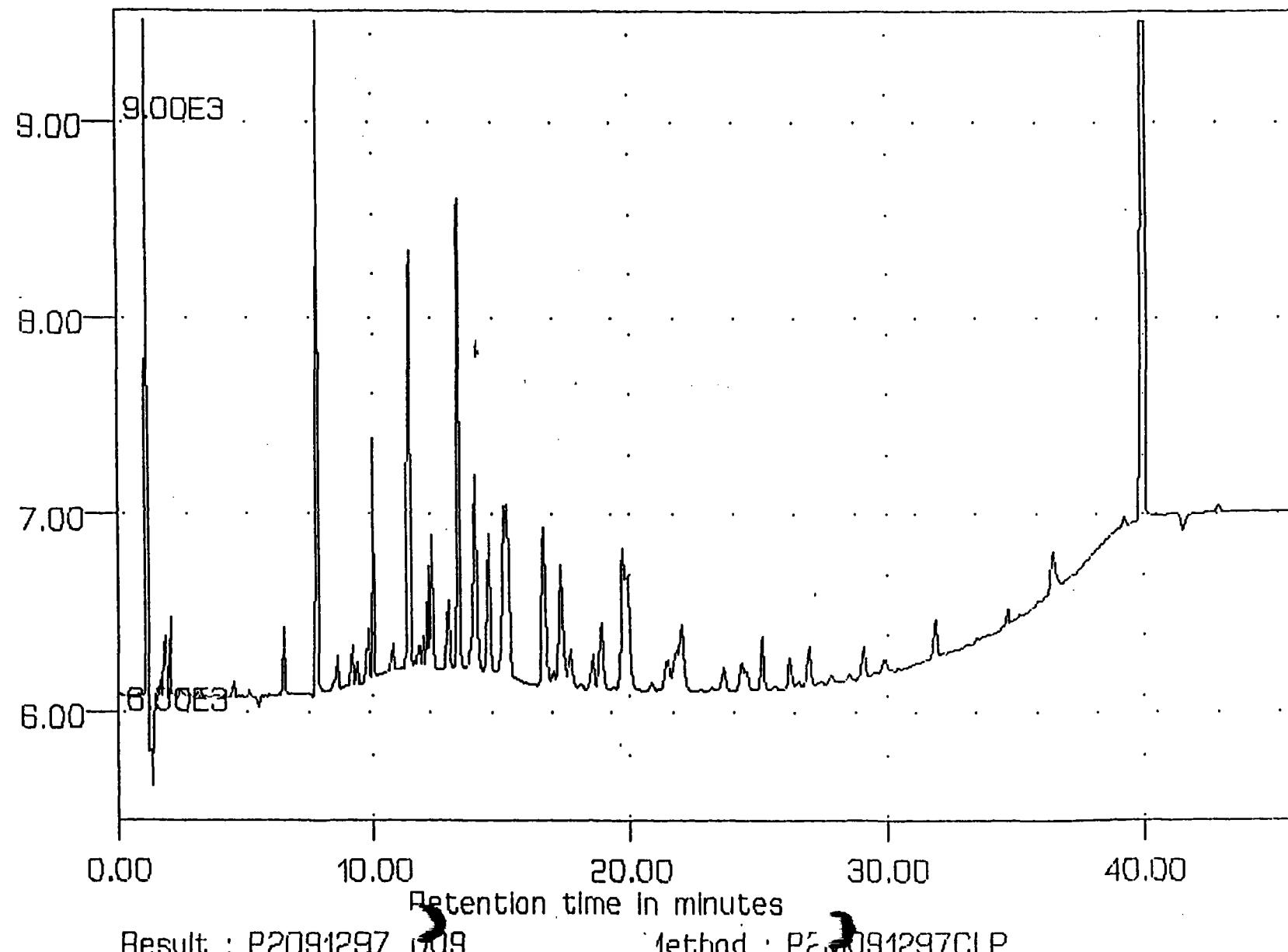
Total Area : 926951 Total PPB : .448

**Method** : /METHOD/P2M091297CLP.MTH  
**Result File** : /RESULT/P2091297\_009.RES

Sample : AR124219

Inj. On :

0337 13Sep1997



Result : P2091297\_009

Method : P2091297CLP

IEA Pesticide Standard Report

Sample Name : AR124219

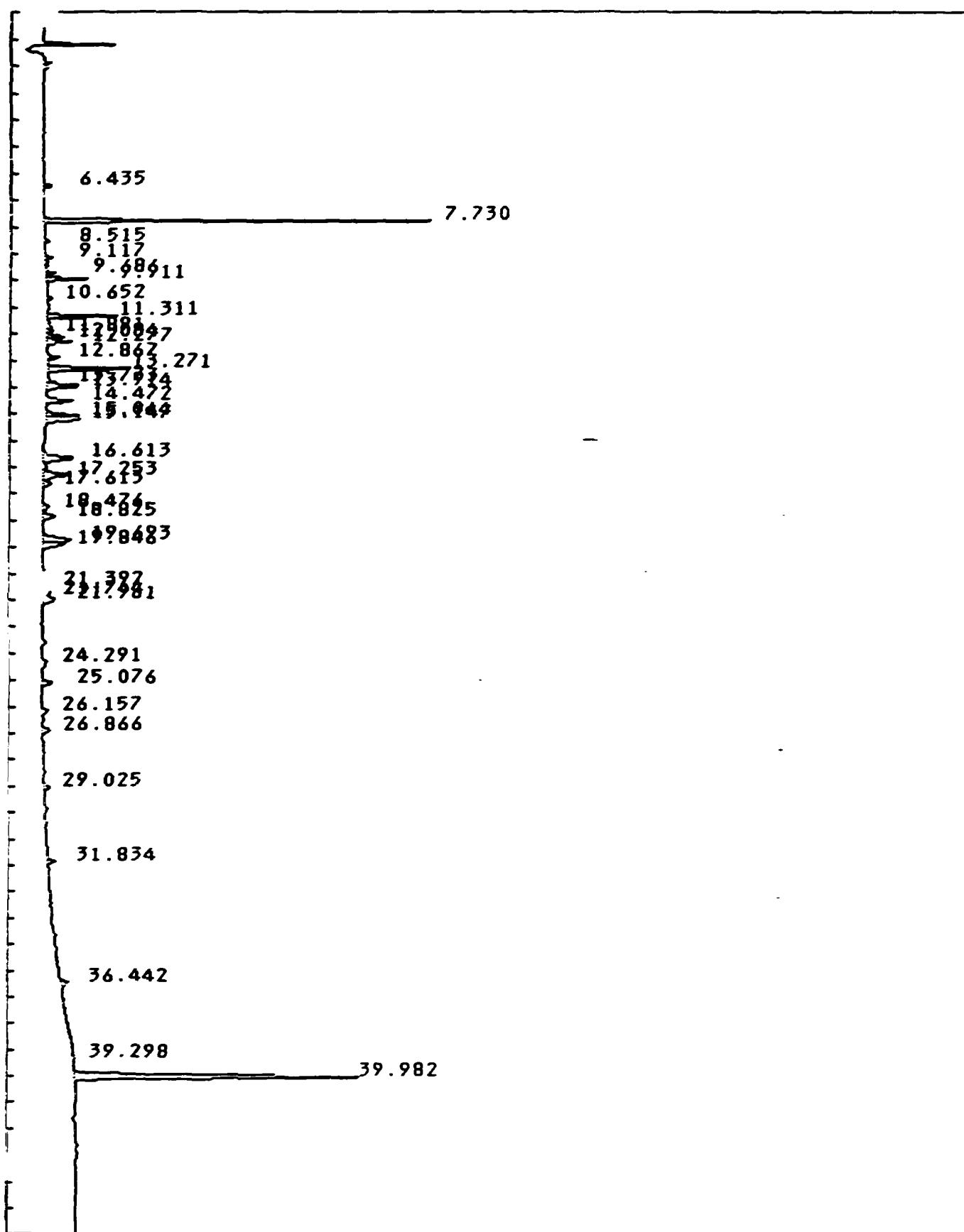
Inj on 0337 13Sep1997

Result File : /RESULT/P2091297\_009.RES

INSTRUMENT : HP5890P2

Column Type : DB-1701 30-Meter, 0.53mm ID

Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR124819 Report No : 80.01  
 Result File : /RESULT/P2091297\_010.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890F2  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0431 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 5 Bottle no. : 5

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.066	5071	BB	0.00000	
2	7.73	7.73	.063	165713	BB	.19871	Tetrachloro-m-xylene
3	9.91		.070	2158	BB	0.00000	
4	11.31		.079	23813	BB	0.00000	
5	12.08		.092	6846	BV	0.00000	
6	12.27		.087	6018	VB	0.00000	
7	13.26		.106	45217	BB	0.00000	
8	13.77		.098	6605	BV	0.00000	
9	13.91		.114	16877	VB	0.00000	
10	14.47		.113	16153	BB	0.00000	
11	15.04		.126	50632	BV	0.00000	
12	15.13		.140	51692	VB	0.00000	
13	16.62		.169	60485	BV	0.00000	
14	17.25		.161	43469	VV	0.00000	
15	18.48		.166	12309	BV	0.00000	
16	18.83		.174	27062	VB	0.00000	
17	19.69		.315	113250	BB	0.00000	
18	21.40		.183	18253	BV	0.00000	
19	21.72		.251	25638	VV	0.00000	
20	21.98		.230	36186	VB	0.00000	
21	23.60		.172	12761	BB	0.00000	
22	24.30		.161	15435	BV	0.00000	
23	24.47		.144	9861	VB	0.00000	
24	25.09		.153	27062	BB	0.00000	
25	26.17		.154	12402	BV	0.00000	
26	26.88		.144	19938	BB	0.00000	
27	29.03		.139	15496	BB	0.00000	
28	29.88		.186	6197	BB	0.00000	
29	31.85		.121	5485	BB	0.00000	
30	36.46		.124	6659	PB	0.00000	
31	39.31		.603	8441	BB	0.00000	
32	40.00	#39.99	.129	219798	BB	.21667	Decachlorobiphenyl

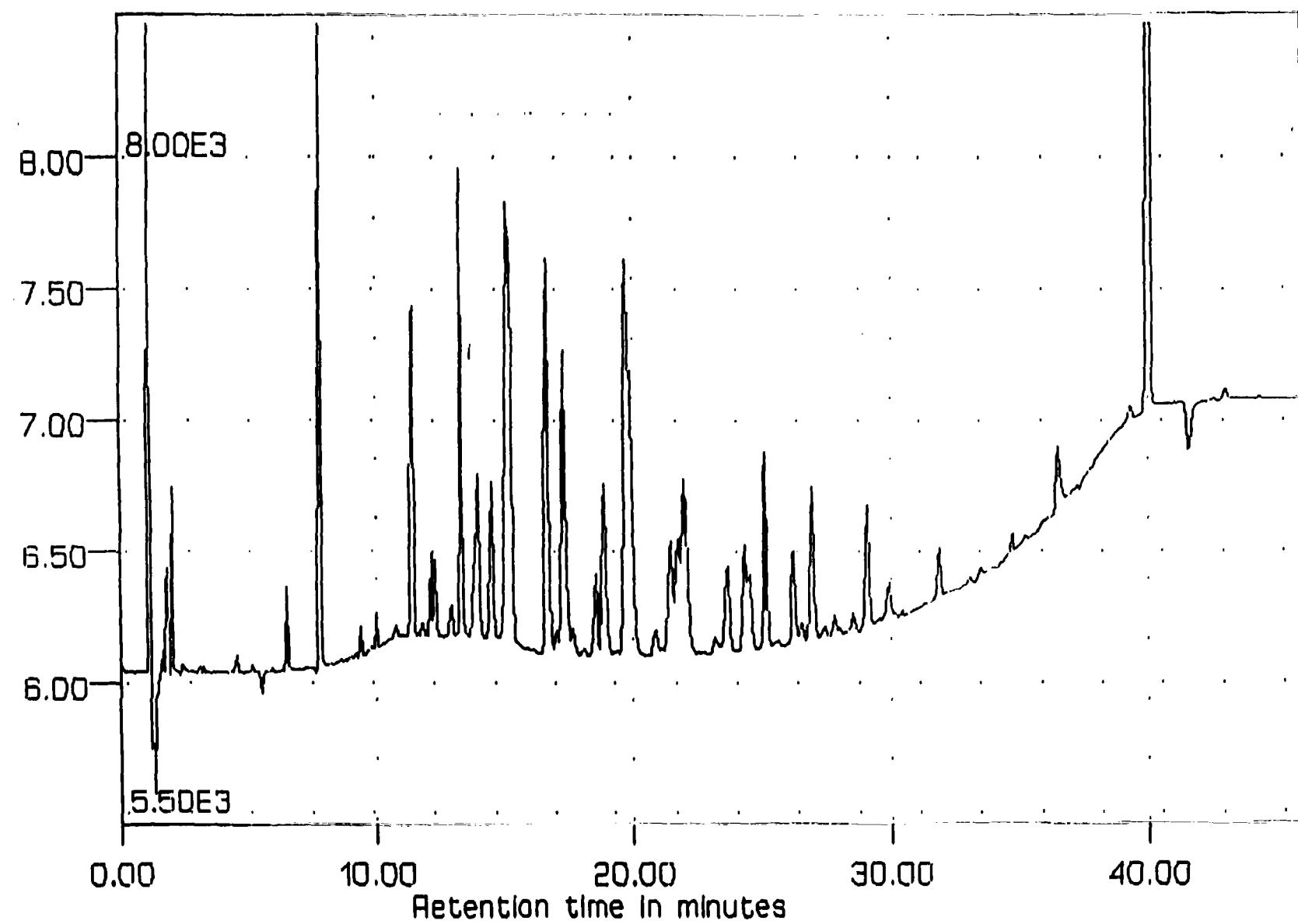
Total Area : 1092983 Total PPB : .415

Report Time : 1542 19Sep1997  
 Method : /METHOD/P2M091297CLP.MTH  
 Result File : /RESULT/P2091297\_010.RES

Sample : AR124819

Inj. On :

0431 13Sep1997

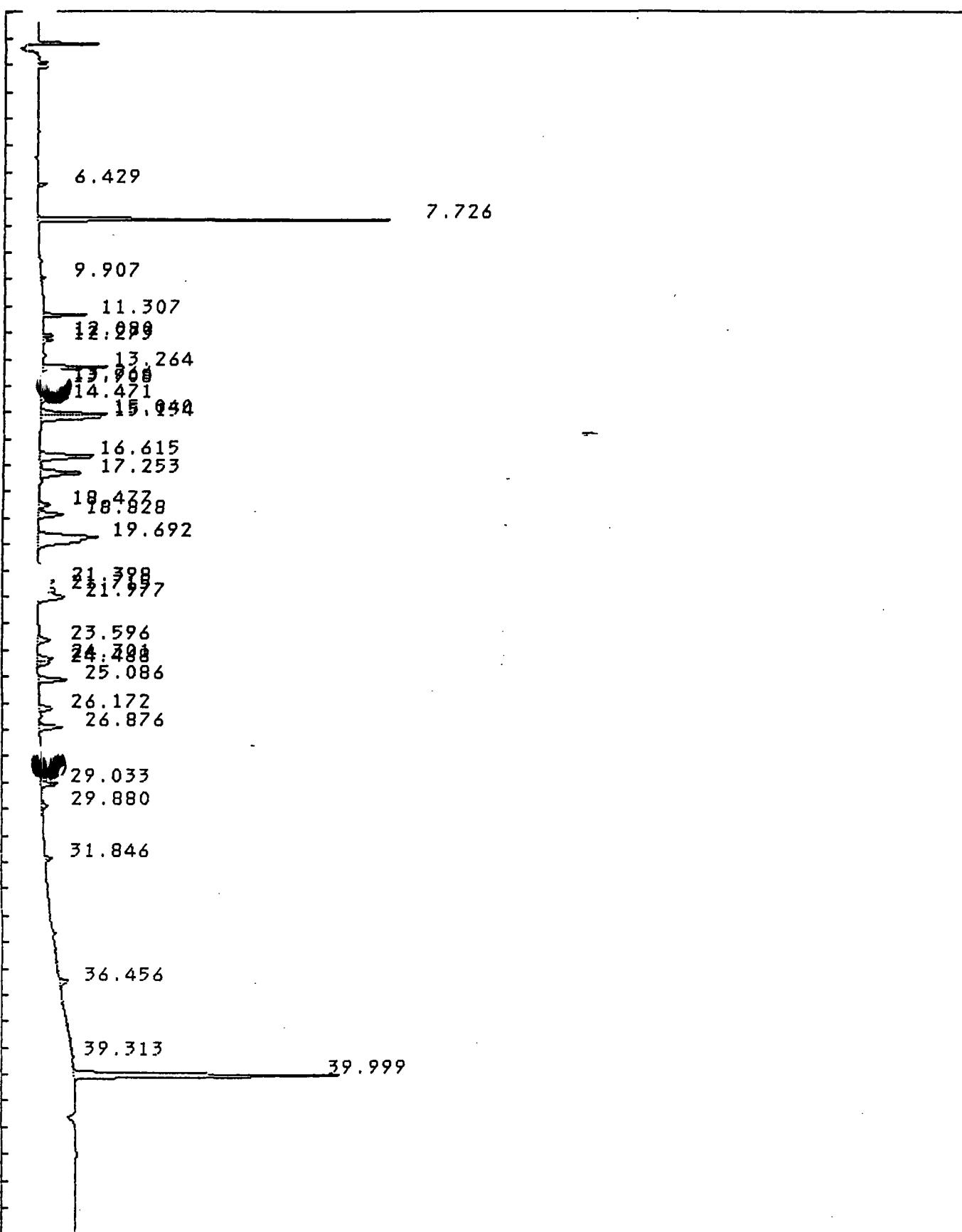


Result : P2091297\_010

Method : P2MD91297CLP

IEA Pesticide Standard Report

Sample Name : AR124819 Inj on 0431 13Sep1997  
Result File : /RESULT/P2091297\_010.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR125419 Report No : 81.01  
 Result File : /RESULT/P2091297\_011.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : External STD  
 Run Time : 46.00 Mins. Injected on 0525 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 6 Bottle no. : 6

x Dil-Fact  
 100.00

Run Status : RunStatusOK

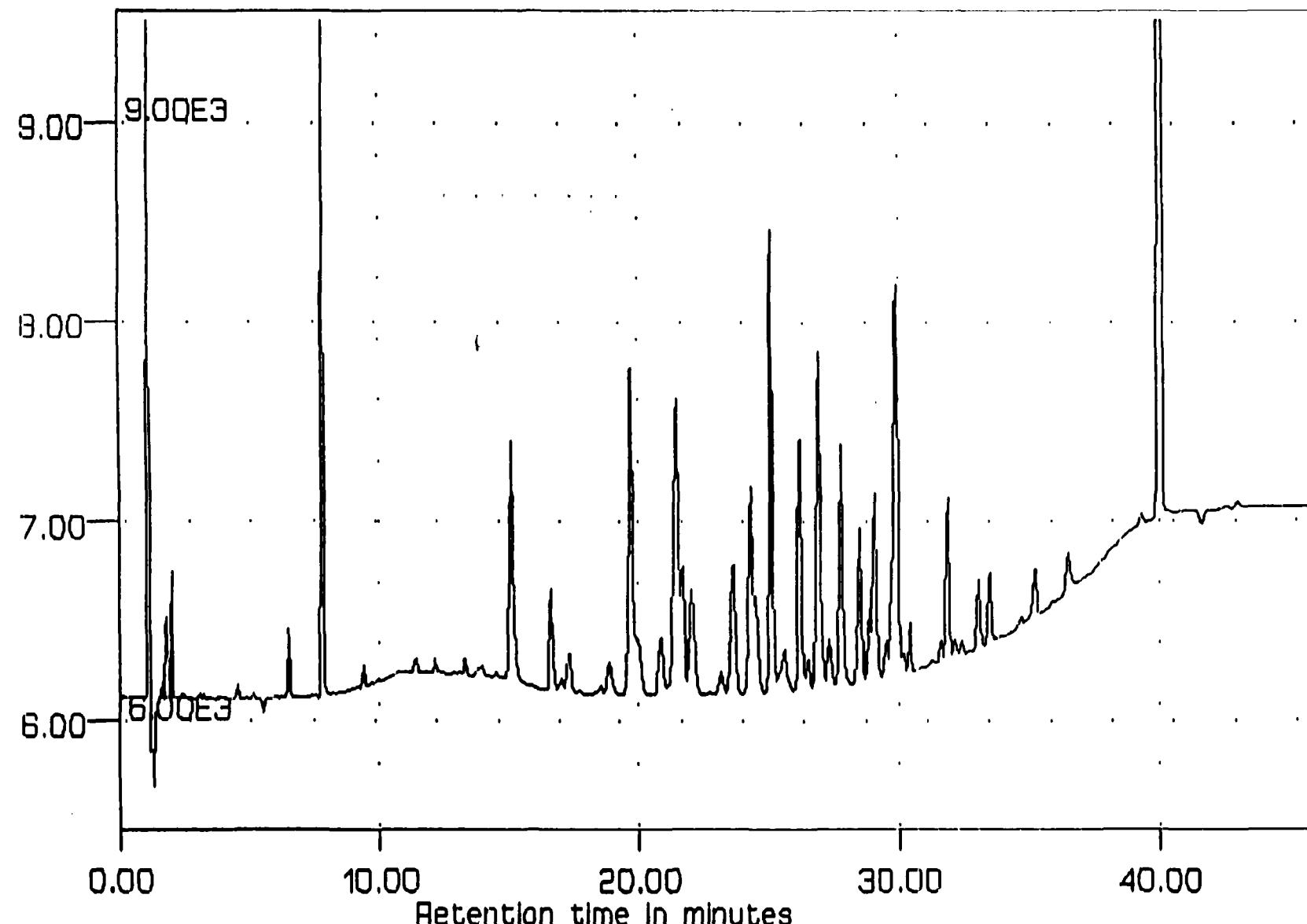
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.067	5536	BB	0.00000	
2	7.73	7.73	.063	168157	BB	.20164	Tetrachloro-m-xylene
3	15.04		.152	43697	BB	0.00000	
4	16.62		.146	17732	BV	0.00000	
5	17.26		.148	6545	VB	0.00000	
6	18.84		.184	6825	BB	0.00000	
7	19.66		.203	79828	BV	0.00000	
8	19.94		.183	12099	VB	0.00000	
9	20.83		.176	11135	BB	0.00000	
10	21.40		.193	67205	BV	0.00000	
11	21.64		.174	25940	VU	0.00000	
12	22.05		.198	24576	VB	0.00000	
13	23.59		.183	28493	VB	0.00000	
14	24.30		.168	41751	BV	0.00000	
15	24.48		.149	17298	VB	0.00000	
16	25.08		.156	86945	BV	0.00000	
17	25.57		.263	13331	VU	0.00000	
18	26.17		.155	46965	PV	0.00000	
19	26.48		.145	5219	VU	0.00000	
20	26.87		.158	64057	VU	0.00000	
21	27.32		.187	10853	VU	0.00000	
22	27.76		.142	41133	VB	0.00000	
23	28.49		.140	26071	BV	0.00000	
24	28.84		.124	10703	VU	0.00000	
25	29.03		.144	32477	VB	0.00000	
26	29.50		.127	5410	BV	0.00000	
27	29.87		.169	79775	VU	0.00000	
28	30.38		.134	8138	VB	0.00000	
29	31.59		.108	2298	BV	0.00000	
30	31.84		.122	23250	VU	0.00000	
31	33.03		.118	9681	BV	0.00000	
32	33.42		.119	9881	PB	0.00000	
33	35.20		.137	7883	BB	0.00000	
34	36.45		.129	5404	BB	0.00000	
35	39.31		.560	7263	BB	0.00000	
36	39.99 #39.99		.131	225293	BB	.22208	Decachlorobiphenyl

Total Area : 1278847 Total PPB : .424

Sample : AR125419

Inj. On :

0525 13Sep1997

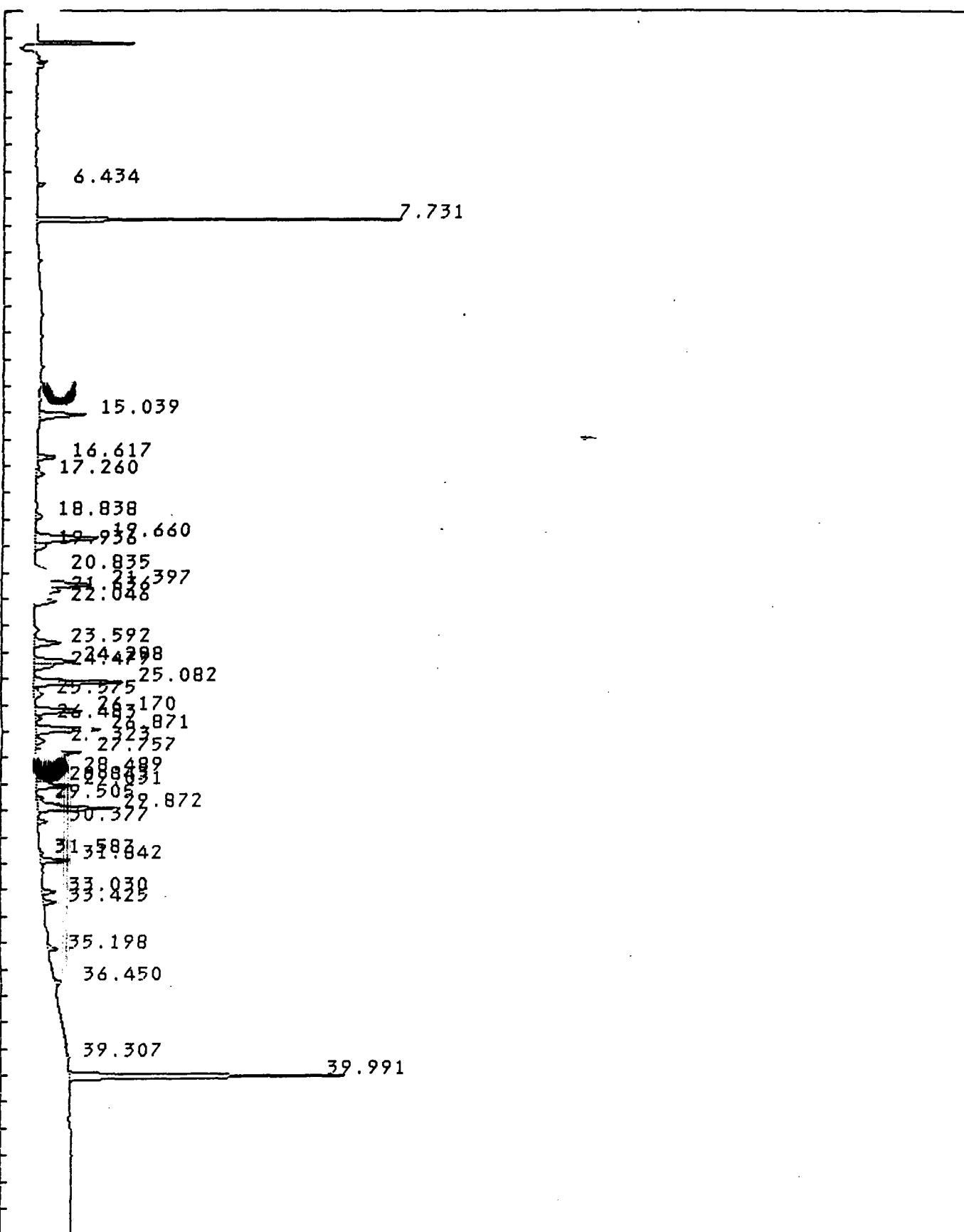


Result : P2091297\_011

Method : P2M091297CLP

IEA Pesticide Standard Report

Sample Name : AR125419 Inj on 0525 13Sep1997  
Result File : /RESULT/P2091297\_011.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : TOXAPH19 Report No : 82.01  
 Result File : /RESULT/P2091297\_012.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0619 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 2/ 7 Bottle no. : 7

x Dil-Fact  
 100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.44		.073	6448	BB	0.00000	
2	7.73	7.73	.062	164512	BB	.19727	Tetrachloro-m-xylene
3	9.91		.072	2682	BB	0.00000	
4	18.47		.206	10550	BB	0.00000	
5	21.62		.278	16391	BB	0.00000	
6	22.71		.265	13119	BV	0.00000	
7	23.67		.198	17041	PU	-	0.00000
8	24.00		.262	9914	UU	0.00000	
9	24.48		.232	9167	UU	0.00000	
10	24.74		.171	7733	UU	0.00000	
11	24.98		.189	19950	UU	0.00000	
12	25.76		.238	34657	UU	0.00000	
3	26.32		.210	49614	UU	0.00000	
4	26.46		.241	50290	UU	0.00000	
15	26.96		.156	35494	UU	0.00000	
16	27.18		.189	18606	UU	0.00000	
17	27.56		.188	31642	UU	0.00000	
18	27.73		.141	14842	UU	0.00000	
19	27.95		.162	15284	UU	0.00000	
20	28.23		.234	78075	UU	0.00000	
21	28.56		.180	62349	UU	0.00000	
22	28.87		.169	20360	UU	0.00000	
23	29.08		.162	35551	UU	0.00000	
24	29.35		.153	9176	UU	0.00000	
25	29.81		.342	116578	UU	0.00000	
26	30.20		.203	74898	UU	0.00000	
27	30.52		.127	32363	UU	0.00000	
28	30.67		.210	67232	UU	0.00000	
29	31.32		.351	188657	UU	0.00000	
30	31.73		.145	78124	UU	0.00000	
31	31.88		.170	88261	UU	0.00000	
32	32.22		.151	62979	UU	0.00000	
33	32.44		.145	26310	UU	0.00000	
34	32.60		.134	23088	UU	0.00000	
35	32.82		.140	31891	UU	0.00000	
36	33.00		.150	40442	UU	0.00000	
37	33.21		.131	78342	UU	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	33.42		.146	29503	VU	0.00000	
40	33.69		.189	141545	VU	0.00000	
	34.05		.153	58305	VU	0.00000	
41	34.52		.164	34225	VU	0.00000	
42	34.65		.109	15420	VU	0.00000	
43	34.91		.144	56659	VU	0.00000	
44	35.07		.103	9822	VU	0.00000	
45	35.17		.123	11521	VB	0.00000	
46	35.57		.128	13947	BV	0.00000	
47	35.88		.139	10322	PV	0.00000	
48	36.42		.205	43788	VU	0.00000	
49	36.66		.144	18049	VU	0.00000	
50	36.92		.121	4974	VU	0.00000	
51	37.15		.114	5726	VU	0.00000	
52	38.68		.135	8741	BV	0.00000	
53	39.31		.249	4794	VU	0.00000	
54	39.62		.124	2829	VU	0.00000	
55	39.99	#39.99	.129	219528	PB	.21640	Decachlorobiphenyl

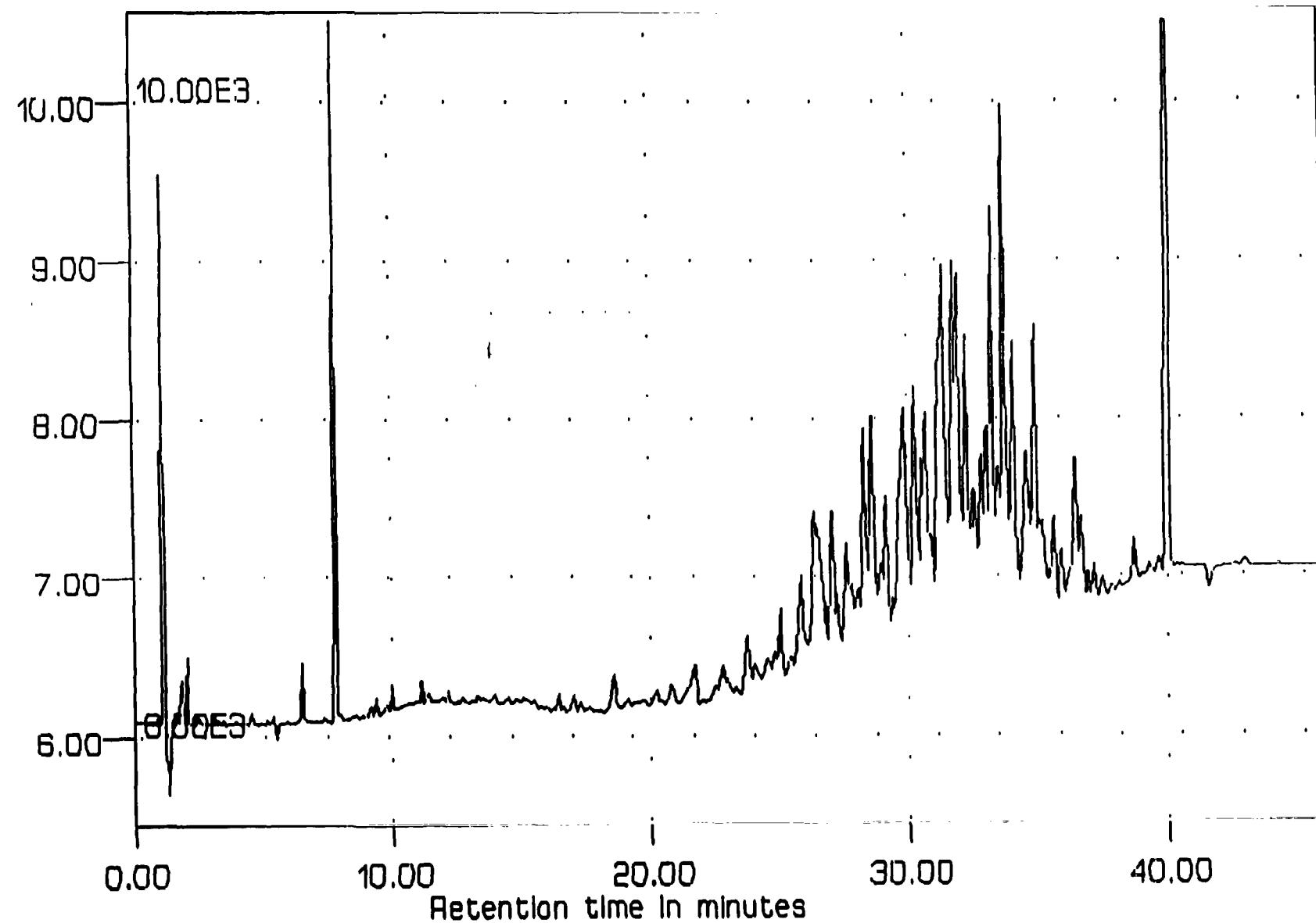
Total Area : 2332107 Total PPB : .414

Report Time : 1553 19Sep1997  
Method : /METHOD/P2M091297CLP.MTH  
Result File : /RESULT/P2091297\_012.RES

Sample : TDXAPH19

Inj. On :

0619 13Sep1997

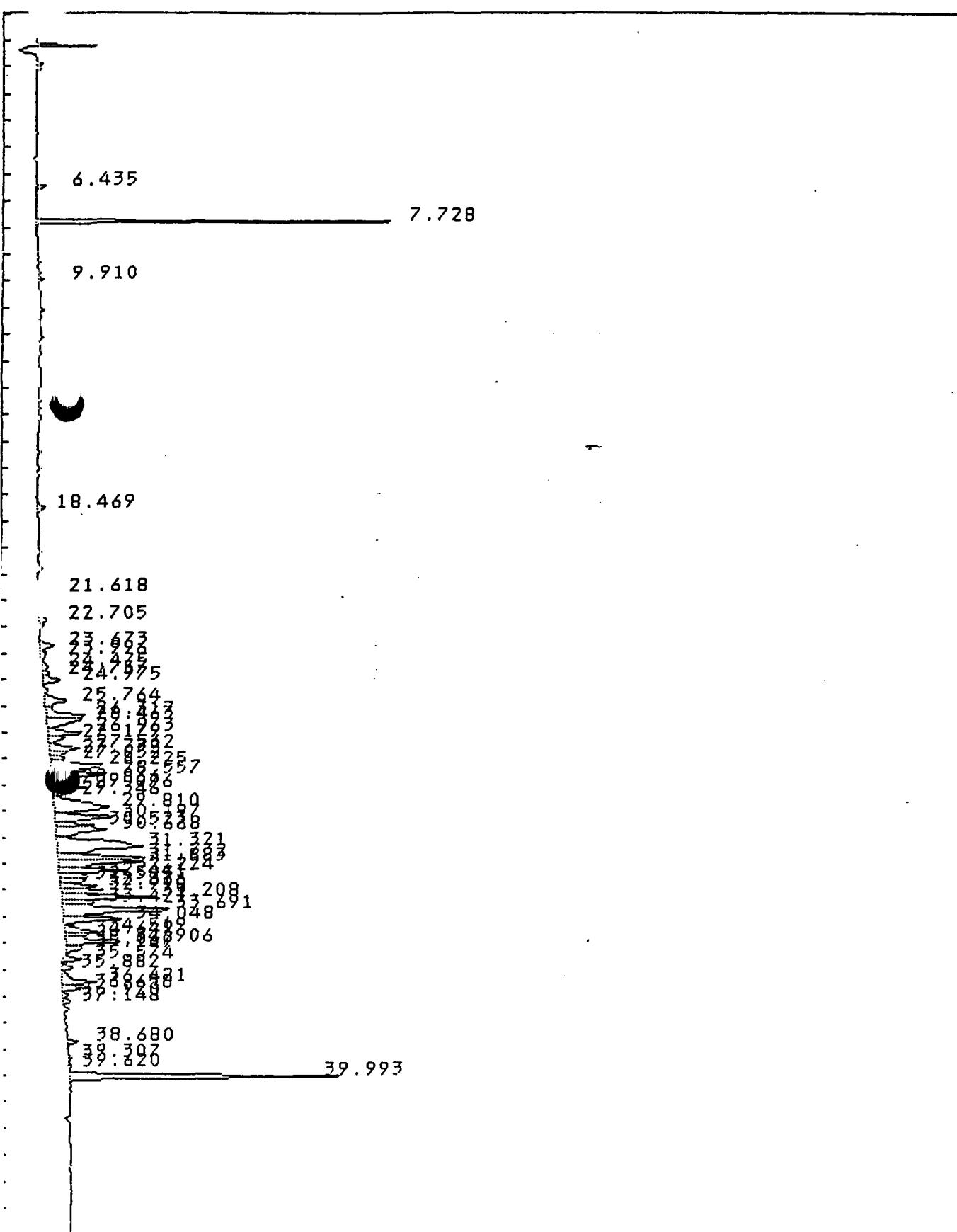


Result : P2091297\_012

Method : P2M091297CLP

## IEA Pesticide Standard Report

Sample Name : TOXAPH19 Inj on 0619 13Sep1997  
Result File : /RESULT/P2091297\_012.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDAL92 Report No : 83.01  
 Result File : /RESULT/P2091297\_013.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0713 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 1 Bottle no. : 1

x Dil-Fact  
 100.00

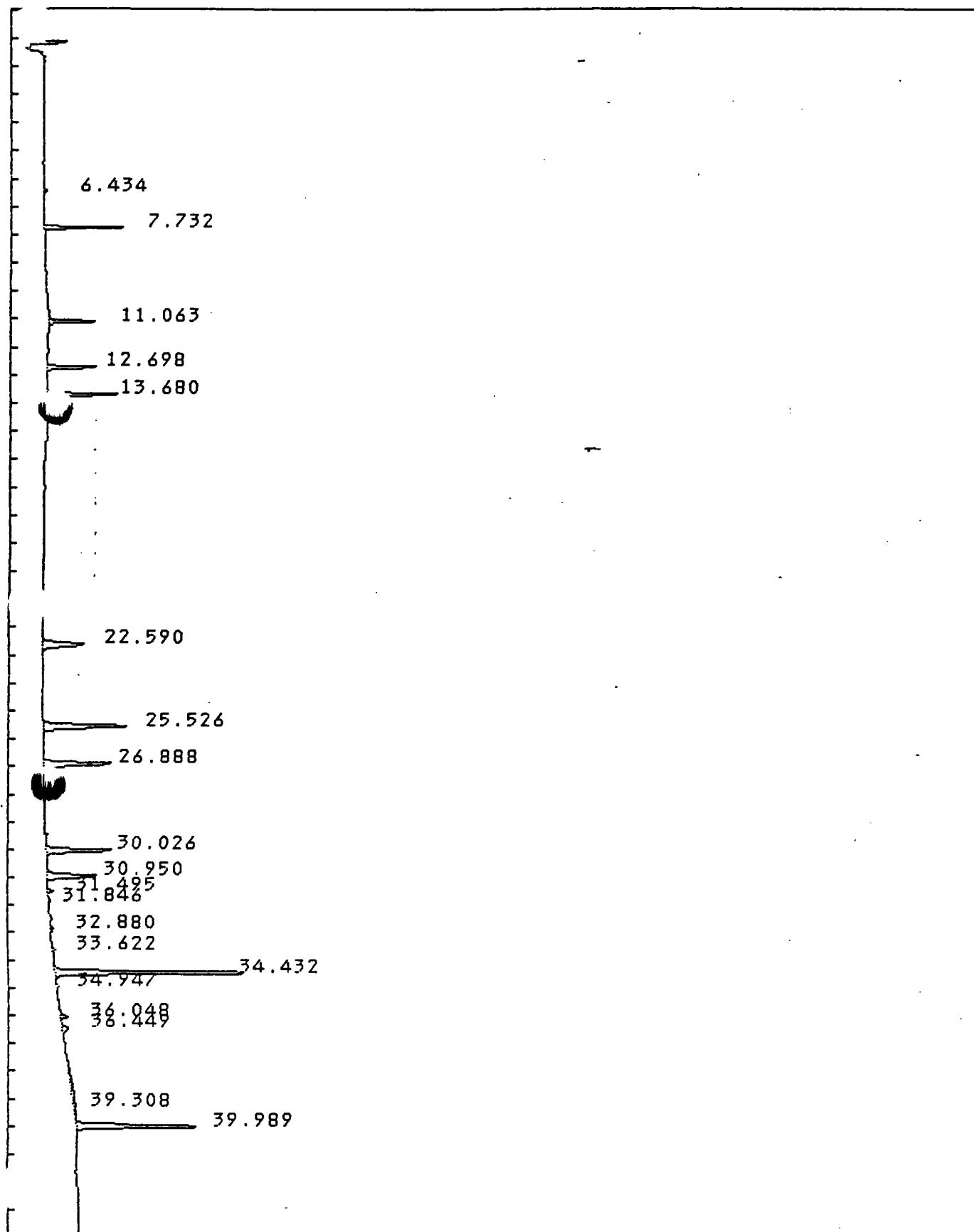
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.065	2175	BB	0.00000	
2	7.73	7.73	.066	37529	BB	.04500	Tetrachloro-m-xylene
3	11.06	11.06	.070	27091	BB	.04105	alpha-BHC
4	12.70	12.70	.086	30856	BB	.04349	gamma-BHC (Lindane)
5	13.68	13.68	.104	47808	BV	.04814	Heptachlor
6	22.59	22.58	.174	45155	BB	.04993	Endosulfan I
7	25.53	25.52	.150	80975	BB	.09759	Dieldrin
8	26.89	26.88	.142	63317	BB	.09619	Endrin
9	30.03	30.02	.123	54766	BV	.08880	4,4'-DDD
10	30.95	30.94	.127	39037	BB	.07288	4,4'-DDT
11	31.50		.124	3896	BV	0.00000	
12	31.85		.133	2265	VB	0.00000	
	32.88		.133	2454	VB	0.00000	
14	33.62		.123	2286	BB	0.00000	
15	34.43	34.43	.113	157921	BV	.38872	Methoxychlor
16	34.95		.110	1175	VB	0.00000	
17	36.05	36.04	.126	6064	BV	.00963	Endrin ketone
18	36.45		.188	7877	PU	0.00000	
19	39.31		1.297	19813	UU	0.00000	
20	39.99	#39.99	.136	109082	VB	.10753	Decachlorobiphenyl

Total Area : 741545 Total PPB : 1.089

Report Time : 1559 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_013.RES

Sample Name : INDAL92 Inj on 0713 13Sep1997  
Result File : /RESULT/P2091297\_013.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDBL92 Report No : 84.01  
 Result File : /RESULT/P2091297\_014.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890PZ  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0807 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 2 Bottle no. : 2

x Dil-Fact  
 100.00

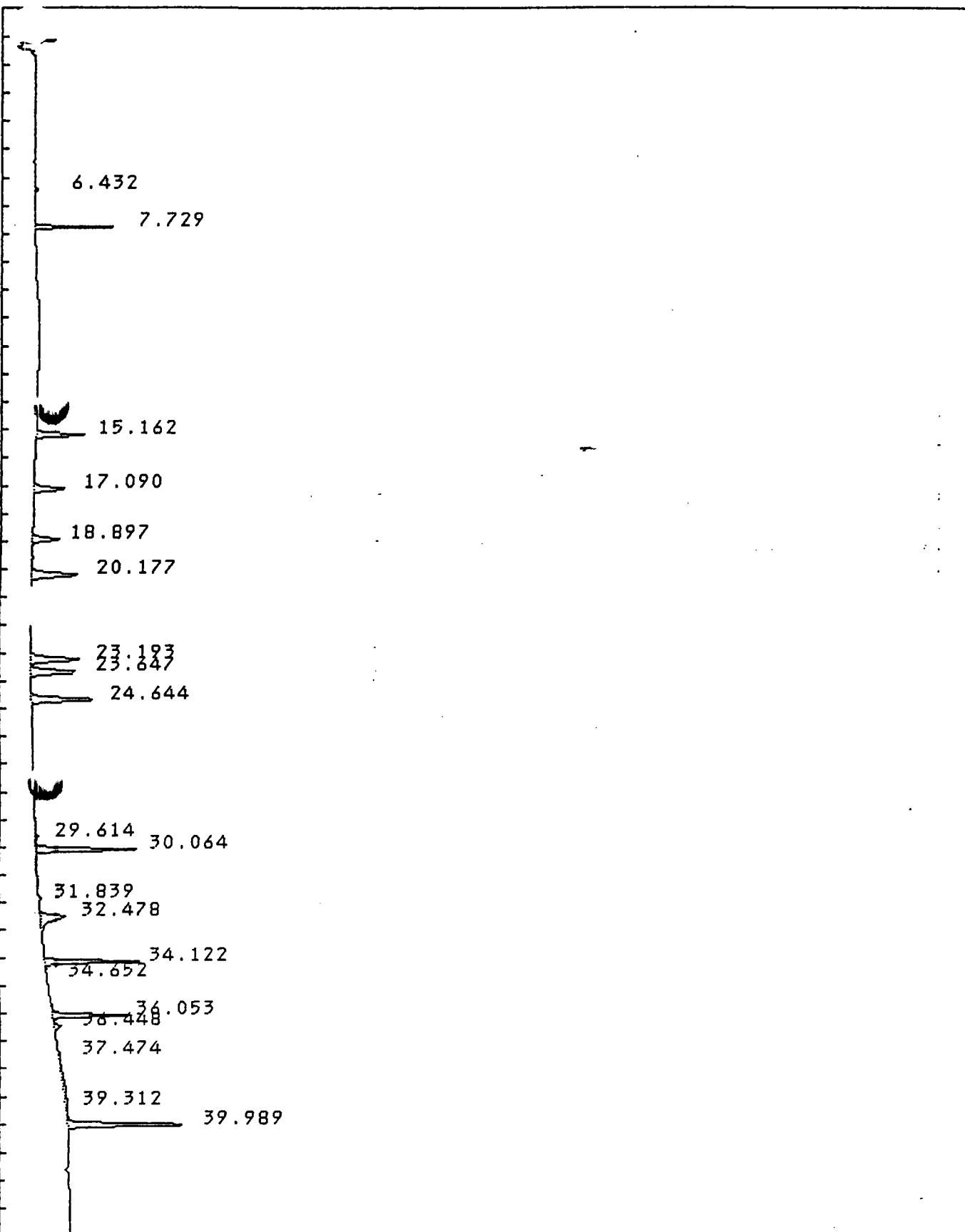
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.064	1983	BB	0.00000	
2	7.73	7.73	.066	36411	BB	.04366	Tetrachloro-m-xylene
3	15.16	15.16	.121	37036	BB	.05105	Aldrin
4	17.09	17.09	.141	27977	BB	.05289	beta-BHC
5	18.90	18.90	.154	24818	BB	.04975	delta-BHC
6	20.18	20.18	.183	51986	BB	.05350	Heptachlor epoxide
7	23.19	23.19	.170	51247	BU	.05320	gamma-Chlordane
8	23.65	23.65	.164	47141	UB	.05269	alpha-Chlordane
9	24.64	24.64	.160	63268	BB	.10022	4,4'-DDE
10	29.61		.126	1664	BU	0.00000	
11	30.06	30.06	.128	81452	UB	.10546	Endosulfan II
12	31.84		.101	1167	BB	0.00000	
13	32.48	32.47	.278	41832	BB	.10247	Endrin aldehyde
14	34.12	34.11	.116	70545	BU	.10496	Endosulfan sulfate
15	34.65		.207	1234	UU	0.00000	
16	36.05	36.04	.117	57462	UU	.09127	Endrin ketone
17	36.45		.178	7600	PB	0.00000	
18	37.47		.151	1824	BU	0.00000	
19	39.31		1.339	22060	UU	0.00000	
20	39.99	#39.99	.135	105552	UB	.10405	Decachlorobiphenyl

Total Area : 734259 Total PPB : .965

Report Time : 1603 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_014.RES

Sample Name : INDBL92 Inj on 0807 13Sep1997  
Result File : /RESULT/P2091297\_014.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDAM9E Report No : 85.01  
 Result File : /RESULT/P2091297\_015.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0900 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 3 Bottle no. : 3

x Dil-Fact  
 100.00

Run Status : RunStatusOK

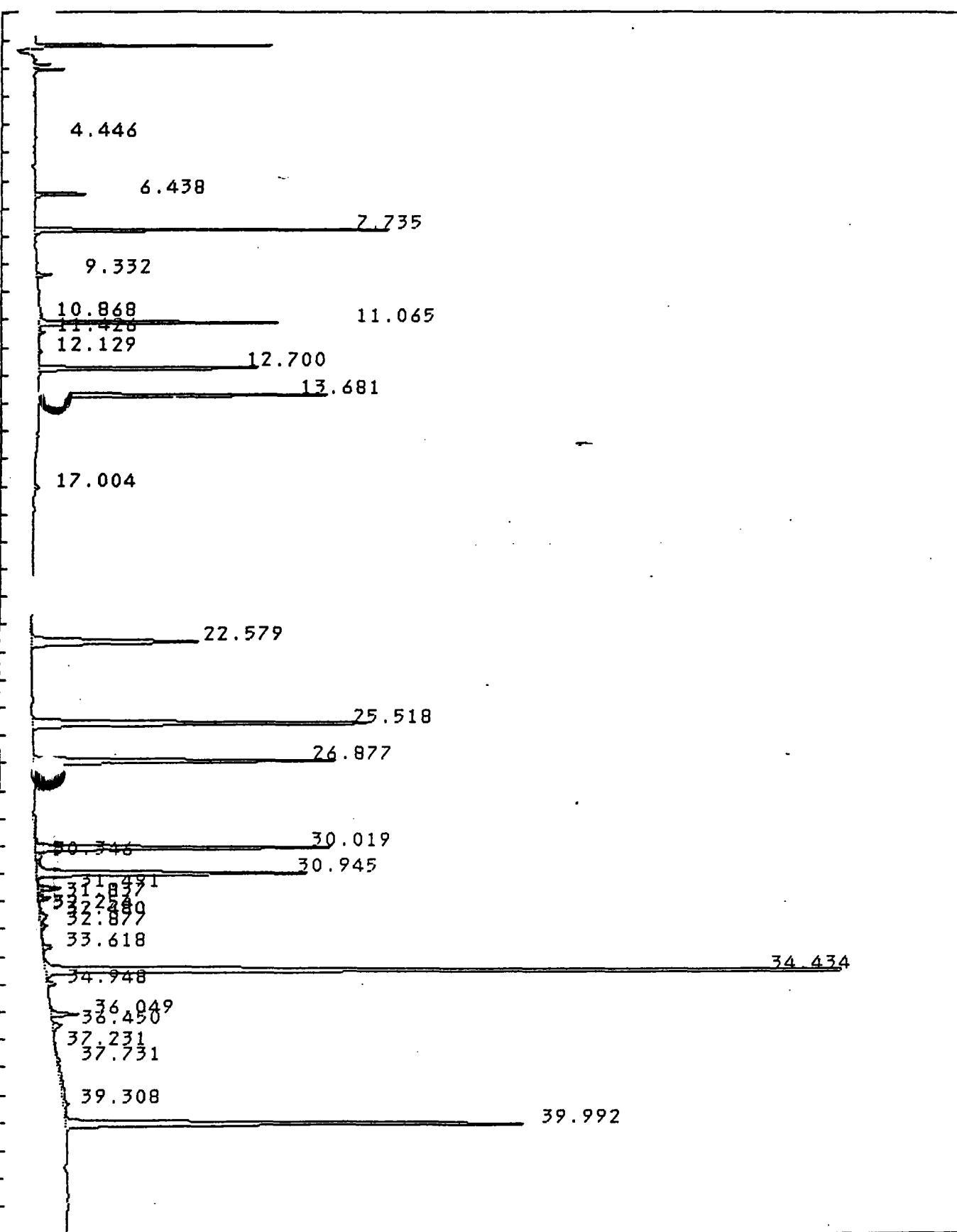
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	4.45		.064	1033	BB	0.00000	
2	6.44		.066	31955	BB	0.00000	
3	7.74	7.73	.062	166791	BB	.20000	Tetrachloro-m-xylene
4	9.33		.077	8079	BB	0.00000	
5	10.87		.179	3130	BV	0.00000	
6	11.07	11.06	.065	131981	VU	.20000	alpha-BHC
7	11.43		.088	3493	VB	0.00000	
8	12.13		.078	1327	BB	0.00000	
9	12.70	12.70	.080	141894	BV	.20000	gamma-BHC (Lindane)
10	13.68	13.68	.100	198638	BV	.20000	Heptachlor
11	17.00		.150	4548	BB	0.00000	
12	22.58	22.58	.177	180886	BB	.20000	Endosulfan I
	25.52	25.52	.144	331892	BB	.40000	Dieldrin
14	26.88	26.88	.136	263290	BB	.40000	Endrin
15	30.02	30.02	.124	246691	PV	.40000	4,4'-DDD
16	30.35		.211	7648	VU	0.00000	
17	30.94	30.94	.123	214250	VU	.40000	4,4'-DDT
18	31.49		.121	17706	VU	0.00000	
19	31.84		.127	9608	VU	0.00000	
20	32.25		.104	934	PV	0.00000	
21	32.48	32.47	.263	11261	VU	.02758	Endrin aldehyde
22	32.88		.148	5963	VB	0.00000	
23	33.62		.154	8748	BV	0.00000	
24	34.43	34.43	.113	812525	VU	2.00000	Methoxychlor
25	34.95		.112	6381	VB	0.00000	
26	36.05	36.04	.136	23711	BV	.03766	Endrin ketone
27	36.45		.200	12248	VU	0.00000	
28	37.23		.366	1989	VU	0.00000	
29	37.73		.231	4953	PV	0.00000	
30	39.31		.738	26806	VU	0.00000	
31	39.99	#39.99	.131	405782	VB	.40000	Decachlorobiphenyl

Total Area : 3286143 Total PPB : 5.065

Report Time : 1608 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_015.RES

IEA Pesticide Standard Report

Sample Name : INDAM9E Inj on 0900 13Sep1997  
Result File : /RESULT/P2091297\_015.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDBM9E Report No : 86.01  
 Result File : /RESULT/P2091297\_016.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0954 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 4 Bottle no. : 4

x Dil-Fact  
 100.00

Run Status : RunStatusOK

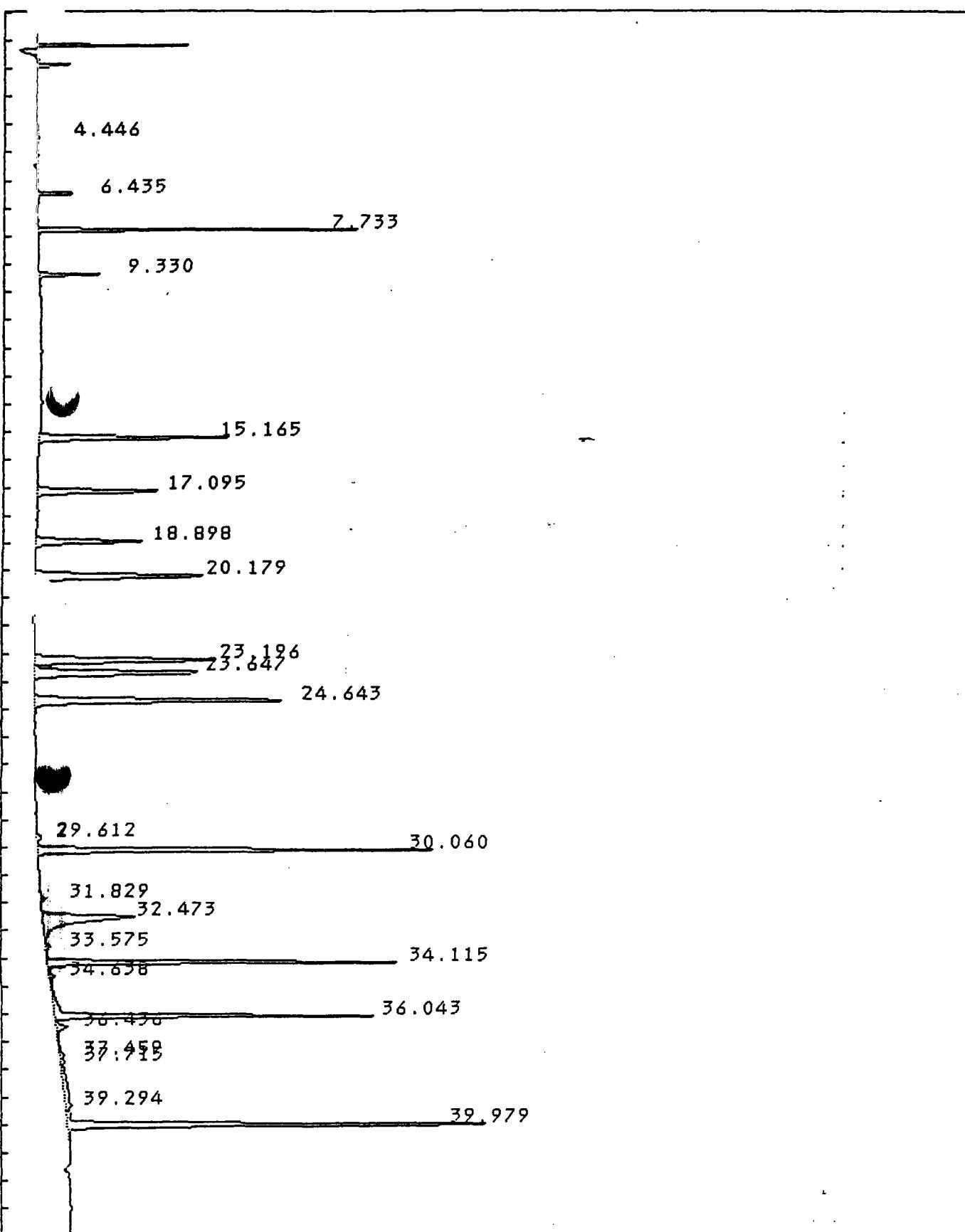
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	4.45		.069	1129	BB	0.00000	
2	6.44		.066	23275	BB	0.00000	
3	7.73	7.73	.063	147757	BB	.17718	Tetrachloro-m-xylene
4	9.33		.077	32819	BU	0.00000	
5	15.16	15.16	.118	145092	BB	.20000	Aldrin
6	17.10	17.09	.134	105787	BB	.20000	beta-BHC
7	18.90	18.90	.152	99773	BB	.20000	delta-BHC
8	20.18	20.18	.182	194330	BB	.20000	Heptachlor epoxide
9	23.20	23.19	.169	192642	BU	.20000	gamma-Chlordane
10	23.65	23.65	.165	178948	VB	.20000	alpha-Chlordane
11	24.64	24.64	.151	252518	BB	.40000	4,4'-DDE
12	29.61		.162	4496	BU	0.00000	
3	30.06	30.06	.124	308939	VB	.40000	Endosulfan II
14	31.83		.118	3998	BB	0.00000	
15	32.47	32.47	.291	163289	BU	.40000	Endrin aldehyde
16	33.57		.138	3480	VB	0.00000	
17	34.11	34.11	.114	268834	BU	.40000	Endosulfan sulfate
18	34.64		.165	5895	UU	0.00000	
19	36.04	36.04	.120	251840	UU	.40000	Endrin ketone
20	36.44		.210	14466	UU	0.00000	
21	37.46		.255	7683	UU	0.00000	
22	37.72		.204	5536	UU	0.00000	
23	39.29		1.038	42045	UU	0.00000	
24	39.98	#39.99	.135	381745	VB	.37631	Decachlorobiphenyl

Total Area : 2836316 Total PPB : 3.753

Report Time : 1612 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_016.RES

IEA Pesticide Standard Report

Sample Name : INDBM9E Inj on 0954 13Sep1997  
Result File : /RESULT/P2091297\_016.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDAH92 Report No : 87.01  
 Result File : /RESULT/P2091297\_017.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 1048 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 5 Bottle no. : 5

# Dil-Fact  
100.00

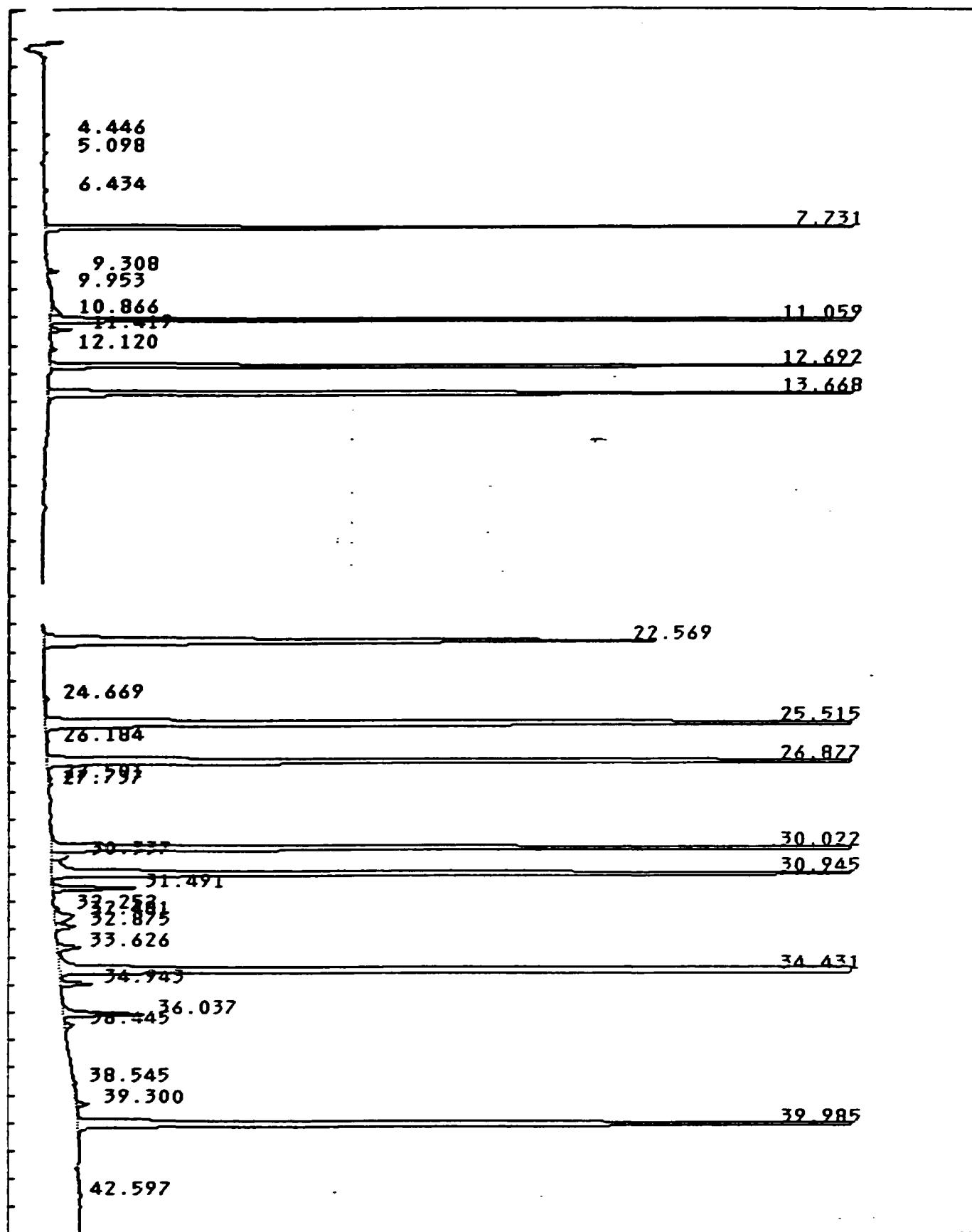
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	4.45		.052	2791	BB	0.00000	
2	5.10		.056	1281	BB	0.00000	
3	6.43		.064	1908	BB	0.00000	
4	7.73	7.73	.063	630979	PB	.75661	Tetrachloro-m-xyle
5	9.31		.068	6222	BB	0.00000	
6	9.95		.202	939	BB	0.00000	
7	10.87		.253	16458	BV	0.00000	
8	11.06	11.06	.063	633992	UU	.96073	alpha-BHC
9	11.42		.082	11457	VB	0.00000	
10	12.12		.079	3106	BB	0.00000	
11	12.69	12.70	.078	641425	BV	.90409	gamma-BHC (Lindane)
12	13.67	13.68	.100	739103	BB	.74417	Heptachlor
	22.57	22.58	.171	656695	BB	.72609	Endosulfan I
..	24.67	24.64	.174	3539	BB	.00561	4,4'-DDE
15	25.52	25.52	.138	1381287	BV	1.66474	Dieldrin
16	26.18		.157	1486	VB	0.00000	
17	26.88	26.88	.132	1125344	BV	1.70967	Endrin
18	27.50		.192	3267	UU	0.00000	
19	27.74		.162	3730	VB	0.00000	
20	30.02	30.02	.118	1062991	BV	1.72360	4,4'-DDD
21	30.34		.199	20922	UU	0.00000	
22	30.94	30.94	.118	889864	UU	1.66136	4,4'-DDT
23	31.49		.120	62944	UU	0.00000	
24	32.25		.107	3619	BV	0.00000	
25	32.48	32.47	.269	32490	UU	.07959	Endrin aldehyde
26	32.88		.147	19236	VB	0.00000	
27	33.63		.153	22508	BV	0.00000	
28	34.43	34.43	.116	2872323	UU	7.07011	Methoxychlor
29	34.94		.116	23808	UU	0.00000	
30	36.04	36.04	.145	76700	PU	.12182	Endrin ketone
31	36.45		.186	10454	PU	0.00000	
32	38.54		.281	5713	PU	0.00000	
33	39.30		.165	12762	VB	0.00000	
34	39.98 #39.99		.132	1320299	BB	1.30149	Decachlorobiphenyl
35	42.60		.166	2514	BV	0.00000	

Total Area : 12304156 Total PPB : 19.430

Report Time : 1618 19Sep1997

Sample Name : INDAH92 Inj on 1048 13Sep1997  
Result File : /RESULT/P2091297\_017.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : INDBH92 Report No : 88.01  
 Result File : /RESULT/P2091297\_018.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 1142 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 6 Bottle no. : 6

% Dil-Fact  
100.00

Run Status : RunStatusOK  
SpecialInteg

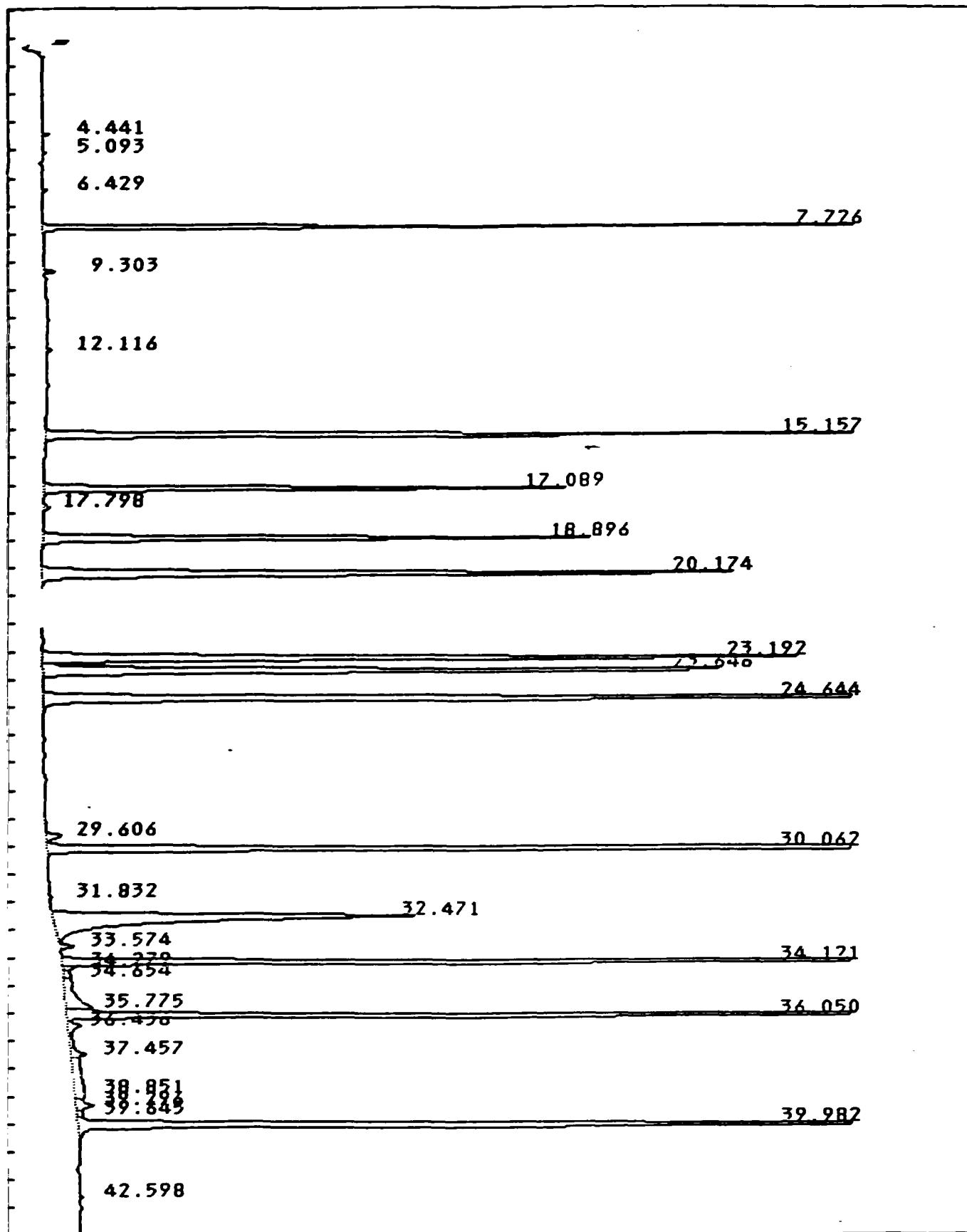
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	4.44		0.000	2936	BB	0.00000	
2	5.09		0.000	1253	BB	0.00000	
3	6.43		0.000	2829	BB	0.00000	
4	7.73	7.73	0.000	640770	BV	.76835	Tetrachloro-m-xylene
5	9.30		0.000	6356	BB	0.00000	
6	12.12		0.000	2997	BB	0.00000	
7	15.16	15.16	0.000	670610	BB	.92440	Aldrin
8	17.09	17.09	0.000	432672	BB	.81801	beta-BHC
9	17.80		0.000	5101	BB	0.00000	
10	18.90	18.90	0.000	478660	BV	.95950	delta-BHC
11	20.17	20.18	0.000	768200	BB	.79062	Heptachlor epoxide
	23.19	23.19	0.000	772363	BV	.80187	gamma-Chlordane
13	23.65	23.65	0.000	725370	VB	.81070	alpha-Chlordane
14	24.64	24.64	0.000	1248357	BB	1.97745	4,4'-DDE
15	29.61		0.000	18824	BV	0.00000	
16	30.06	30.06	0.000	1315289	VB	1.70298	Endosulfan II
17	31.83		0.000	1532	BB	0.00000	
18	32.47	32.47	0.000	639631	BV	1.56687	Endrin aldehyde
19	33.57		0.000	10770	VB	0.00000	
20	34.12	34.11	0.000	1092035	FF	1.62485	Endosulfan sulfate
21	34.28		0.000	12493	FF	0.00000	
22	34.65		0.000	11657	VU	0.00000	
23	35.78		0.000	85053	FF	0.00000	
24	36.05	36.04	0.000	1038398	FF	1.64930	Endrin ketone
25	36.44		0.000	23256	VU	0.00000	
26	37.46		0.000	28299	VU	0.00000	
27	38.85		0.000	80642	VU	0.00000	
28	39.30		0.000	26926	VU	0.00000	
29	39.65		0.000	8431	VU	0.00000	
30	39.98	#39.99	0.000	1331331	VB	1.31236	Decachlorobiphenyl
31	42.60		0.000	2305	BV	0.00000	

Total Area : 11485348 Total PPB : 15.707

Report Time : 1624 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_018.RES

UserModifiedFile

Sample Name : INDBH92 Inj on 1142 13Sep1997  
Result File : /RESULT/P2091297\_018.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : PEM2Q Report No : 90.01  
 Result File : /RESULT/P2091297\_020.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 1330 13Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 8 Bottle no. : 8

% Dil-Fact  
100.00

Run Status : RunStatusOK

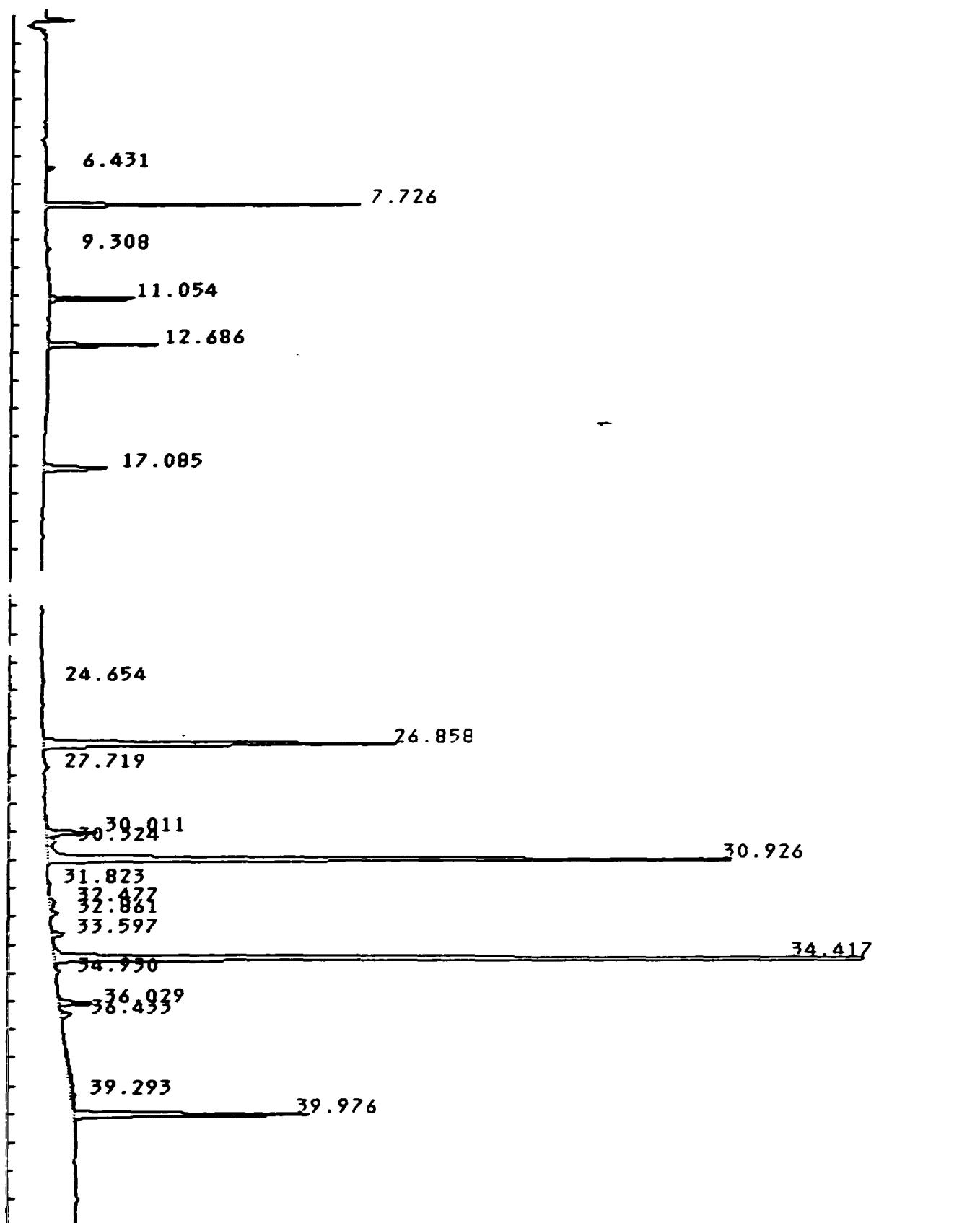
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.067	5476	BB	0.00000	
2	7.73	7.73	.063	142726	BB	.17114	Tetrachloro-m-xylene
3	9.31		.072	1940	BB	0.00000	
4	11.05	11.06	.071	58111	BB	.08806	alpha-BHC
5	12.69	12.70	.085	61864	BB	.08720	gamma-BHC (Lindane)
6	17.08	17.09	.137	54404	BB	.10286	beta-BHC
7	24.65	24.64	.177	2539	BB	.00402	4,4'-DDE
8	26.86	26.88	.138	304377	BV	.46242	Endrin
9	27.72		.126	3079	BB	0.00000	
10	30.01	30.02	.152	48784	BV	.07910	4,4'-DDD
11	30.32		.204	11432	UU	0.00000	
12	30.93	30.94	.119	532241	UU	.99368	4,4'-DDT
13	31.82		.125	2549	BB	0.00000	
14	32.48	32.47	.276	9098	BV	.02229	Endrin aldehyde
15	32.86		.138	7414	VB	0.00000	
16	33.60		.148	12359	BV	0.00000	
17	34.42	34.43	.112	950337	UU	2.33922	Methoxychlor
18	34.93		.109	3387	UU	0.00000	
19	36.03	36.04	.134	30488	PV	.04842	Endrin ketone
20	36.43		.183	13097	PB	0.00000	
21	39.29		.911	24645	BV	0.00000	
22	39.98	#39.99	.134	204386	VB	.20147	Decachlorobiphenyl

Total Area : 2484732 Total PPB : 4.600

Report Time : 1635 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_020.RES

## IE4 Pesticide Standard Report

Sample Name : PEM2Q Inj on 1330 13Sep1997  
Result File : /RESULT/P2091297\_020.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : PEM3G Report No : 98.00  
 Result File : /RESULT/P2091297\_024.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 2106 19Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 12 Bottle no. : 12

% Dil-Fact  
100.00

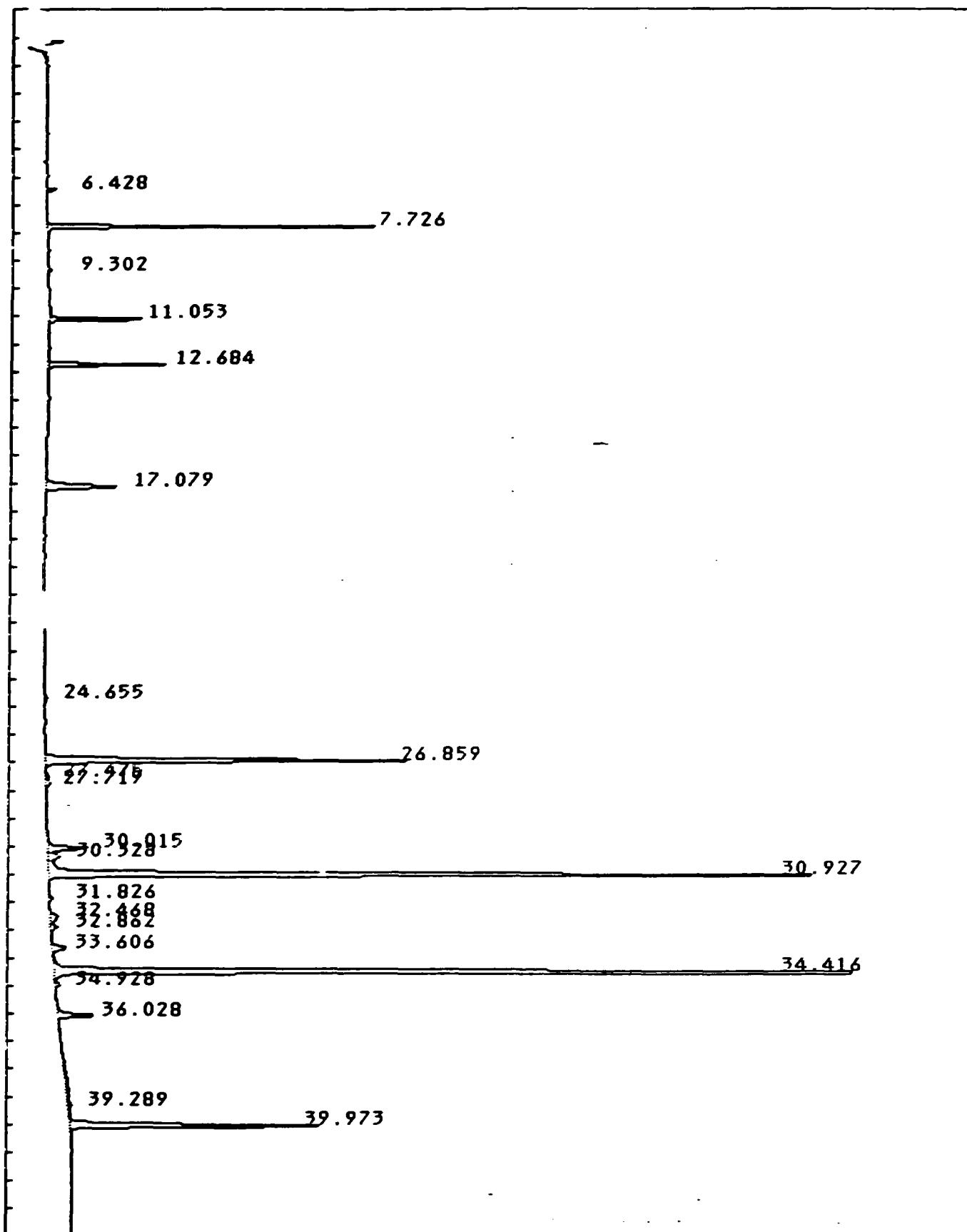
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.065	5139	BB	0.00000	
2	7.73	7.73	.062	150311	BB	.18024	Tetrachloro-m-xylene
3	9.30		.068	1711	BB	0.00000	
4	11.05	11.06	.066	58644	BB	.08887	alpha-BHC
5	12.68	12.70	.083	65362	BB	.09213	gamma-BHC (Lindane)
6	17.08	17.09	.154	67265	BB	.12717	<u>beta-BHC</u>
7	24.66	24.64	.191	3321	BB	.00526	4,4'-DDE
8	26.86	26.88	.134	308477	BV	.46865	Endrin
9	27.48		.195	2525	VU	0.00000	
10	27.72		.153	4626	VB	0.00000	
11	30.01	30.02	.159	39586	BV	.06419	4,4'-DDD
12	30.33		.211	14662	VU	0.00000	
13	30.93	30.94	.118	586367	VU	1.09474	4,4'-DDT
14	31.83		.129	3008	BB	0.00000	
15	32.47	32.47	.283	14115	BV	.03458	Endrin aldehyde
16	32.86		.149	6522	VB	0.00000	
17	33.61		.173	14252	BV	0.00000	
18	34.42	34.43	.114	1014467	VV	2.49707	Methoxychlor
19	34.93		.110	3817	VU	0.00000	
20	36.03	36.04	.135	33280	PV	.05286	Endrin ketone
21	39.29		.780	20491	PV	0.00000	
22	39.97	#39.99	.130	212225	VB	.20920	Decachlorobiphenyl

Total Area : 2630173 Total PPB : 4.915

Report Time : 2151 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_024.RES

Sample Name : PEM3G Inj on 2106 19Sep1997  
Result File : /RESULT/P2091297\_024.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDAM9P Report No : 110.00  
 Result File : /RESULT/P2091297\_036.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0753 20Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 24 Bottle no. : 24

% Dil-Fact  
100.00

Run Status : RunStatusOK

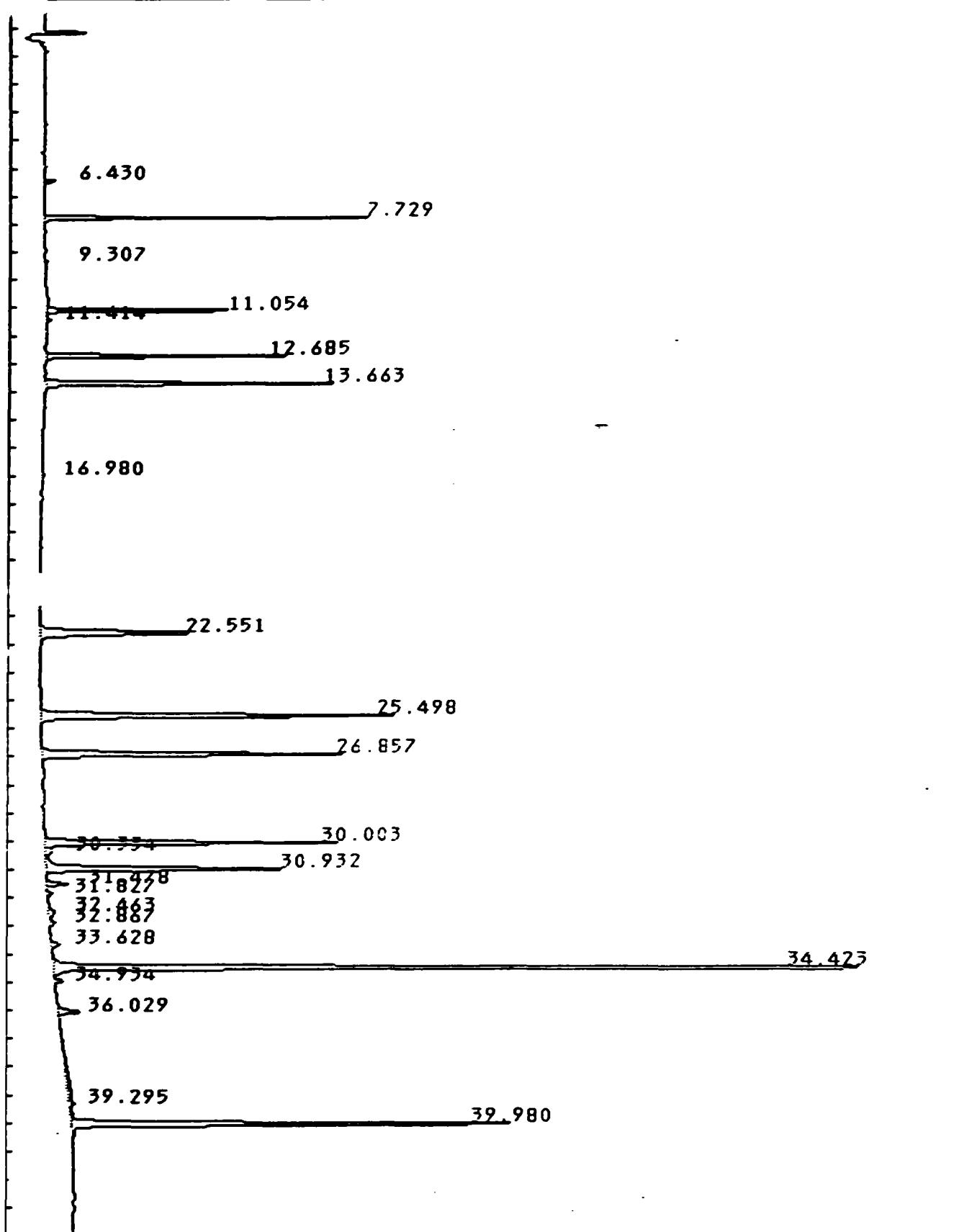
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.064	6196	BB	0.00000	
2	7.73	7.73	.062	144744	BB	.17356	Tetrachloro-m-xylene
3	9.31		.066	1450	BB	0.00000	
4	11.05	11.06	.064	118426	VB	.17946	alpha-BHC
5	11.41		.081	2830	BB	0.00000	
6	12.68	12.70	.079	129428	BB	.18243	gamma-BHC (Lindane)
7	13.66	13.68	.099	183429	BV	.18469	Heptachlor
8	16.98		.143	2473	BB	0.00000	
9	22.55	22.58	.172	166325	BB	.18390	Endosulfan I
10	25.50	25.52	.144	314514	BB	.37906	Dieldrin
11	26.86	26.88	.136	254586	BV	.38678	Endrin
12	30.00	30.02	.121	223806	BV	.36289	4,4'-DDD
13	30.33		.204	8126	VU	0.00000	
14	30.93	30.94	.125	186499	VU	.34819	4,4'-DDT
15	31.48		.119	16216	VU	0.00000	
16	31.83		.129	4806	PB	0.00000	
17	32.46	32.47	.269	9501	VU	.02327	Endrin aldehyde
18	32.87		.140	5739	VB	0.00000	
19	33.63		.150	8429	BV	0.00000	
20	34.42	34.43	.112	736739	VU	1.81345	Methoxychlor
21	34.93		.107	5775	VU	0.00000	
22	36.03	36.04	.141	20400	PV	.03240	Endrin ketone
23	39.30		.927	32462	PV	0.00000	
24	39.98	#39.99	.133	388416	VB	.38288	Decachlorobiphenyl

Total Area : 2971315 Total PPB : 4.633

Report Time : 0839 20Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_036.RES

IEA Pesticide Standard Report

Sample Name : INDAM9P Inj on 0753 20Sep1997  
Result File : /RESULT/P2091297\_036.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDBM9P Report No : 111.00  
 Result File : /RESULT/P2091297\_037.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0847 20Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 25 Bottle no. : 25

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

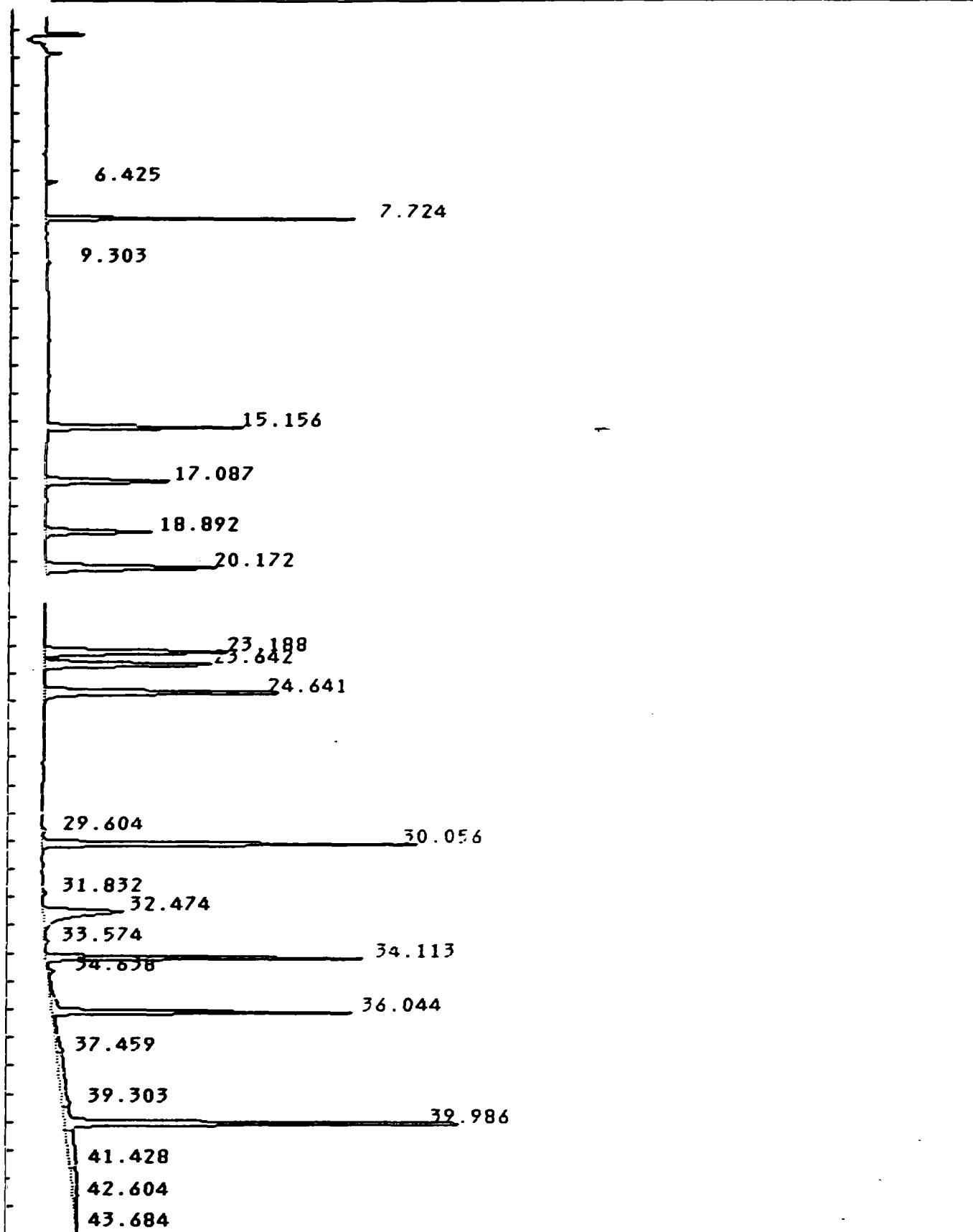
Pk#	RT	ID-tm	Peak	Width	Area	Code	PPB	Name
1	6.43			.064	5927	BB	0.00000	
2	7.72	7.73		.063	142249	BB	.17057	Tetrachloro-m-xylene
	9.30			.070	1668	BB	0.00000	
4	15.16	15.16		.114	143319	BB	.19756	Aldrin
5	17.09	17.09		.133	103332	BB	.19536	beta-BHC
6	18.89	18.90		.150	98681	BB	.19781	delta-BHC
7	20.17	20.18		.178	190743	BB	.19631	Heptachlor epoxide
8	23.19	23.19		.165	188834	BV	.19605	gamma-Chlordane
9	23.64	23.65		.161	175382	BV	.19601	alpha-Chlordane
10	24.64	24.64		.155	246314	BB	.39017	4,4'-DDE
11	29.60			.190	4096	BV	0.00000	
12	30.06	30.06		.121	288533	BV	.37358	Endosulfan II
13	31.83			.132	3397	BB	0.00000	
14	32.47	32.47		.293	142309	BV	.34860	Endrin aldehyde
15	33.57			.124	2939	BV	0.00000	
16	34.11	34.11		.114	241221	BV	.35892	Endosulfan sulfate
17	34.64			.157	7762	VV	0.00000	
18	36.04	36.04		.122	240189	VV	.38149	Endrin ketone
	37.46			.693	31427	VV	0.00000	
	39.30		1.313		67749	VV	0.00000	
21	39.99	#39.99		.137	383494	VV	.37803	Decachlorobiphenyl
22	41.43			1.357	57932	VV	0.00000	
23	42.60			1.613	46297	VV	0.00000	
24	43.68			.126	-542	BV	0.00000	

Total Area : 2813791 Total PPB : 3.580

Report Time : 0934 20Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_037.RES

IEA Pesticide Standard Report

Sample Name : INDBM9P Inj on 0847 20Sep1997  
Result File : /RESULT/P2091297\_037.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## PESTICIDE STANDARDS

COLUMN: RTX-35

INSTRUMENT: HP5890P3

1 ul injected

## COMPOUND

## NG INJECTED

## RESC:

gamma-Chlordane	0.010
Endosulfan I	0.010
p,p'-DDE	0.020

Dieldrin	0.020
Endosulfan sulfate	0.020
F-drin ketone	0.020
methoxychlor	0.100
Tetrachloro-m-xylene	0.020
Decachlorobiphenyl	0.020

## PEM:

gamma-BHC	0.010
alpha-BHC	0.010
,4'-DDT	0.100
beta-BHC	0.010
Endrin	0.050
Methoxychlor	0.250
tetrachloro-m-xylene	0.020
Decachlorobiphenyl	0.020

AR1660	(combination of AR1016 & AR1260)	0.100 each/0.200 total
AR1221		0.200
AR1232		0.100
AR1242		0.100
AR1248		0.100
AR1254		0.100
TOXAPH		0.500

## PESTICIDE STANDARDS

COLUMN: RTX-35

INSTRUMENT: HP5890P3

1 ul injected

## COMPOUND

## NG INJECTED

## LOW

## MEDIUM

## HIGH

## INDA:

	LOW	MEDIUM	HIGH
alpha-BHC	0.005	0.020	0.080
Heptachlor	0.005	0.020	0.080
gamma-BHC	0.005	0.020	0.080
Endosulfan I	0.005	0.020	0.080
Dieldrin	0.010	0.040	0.160
Endrin	0.010	0.040	0.160
4,4'-DDD	0.010	0.040	0.160
4,4'-DDT	0.010	0.040	0.160
Methoxychlor	0.050	0.200	0.800
Tetrachloro-m-xylene	0.005	0.020	0.080
Decachlorobiphenyl	0.010	0.040	0.160

## INDB:

'beta-BHC	0.005	0.020	0.080
delta-BHC	0.005	0.020	0.080
Aldrin	0.005	0.020	0.080
Heptachlor epoxide	0.005	0.020	0.080
alpha-Chlordane	0.005	0.020	0.080
gamma-Chlordane	0.005	0.020	0.080
4,4'-DDE	0.010	0.040	0.160
Endosulfan sulfate	0.010	0.040	0.160
Endrin aldehyde	0.010	0.040	0.160
Endrin ketone	0.010	0.040	0.160
Endosulfan II	0.010	0.040	0.160
Tetrachloro-m-Xylene	0.005	0.020	0.080
Decachlorobiphenyl	0.010	0.040	0.160

## IEA Pesticide Standard Report

Sample Name : RESC89 Report No : 795.010  
 Result File : /RESULT/P3082897\_003.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 2127 28Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 1/ 3 Bottle no. : 3

% Dil-Fact  
100.00

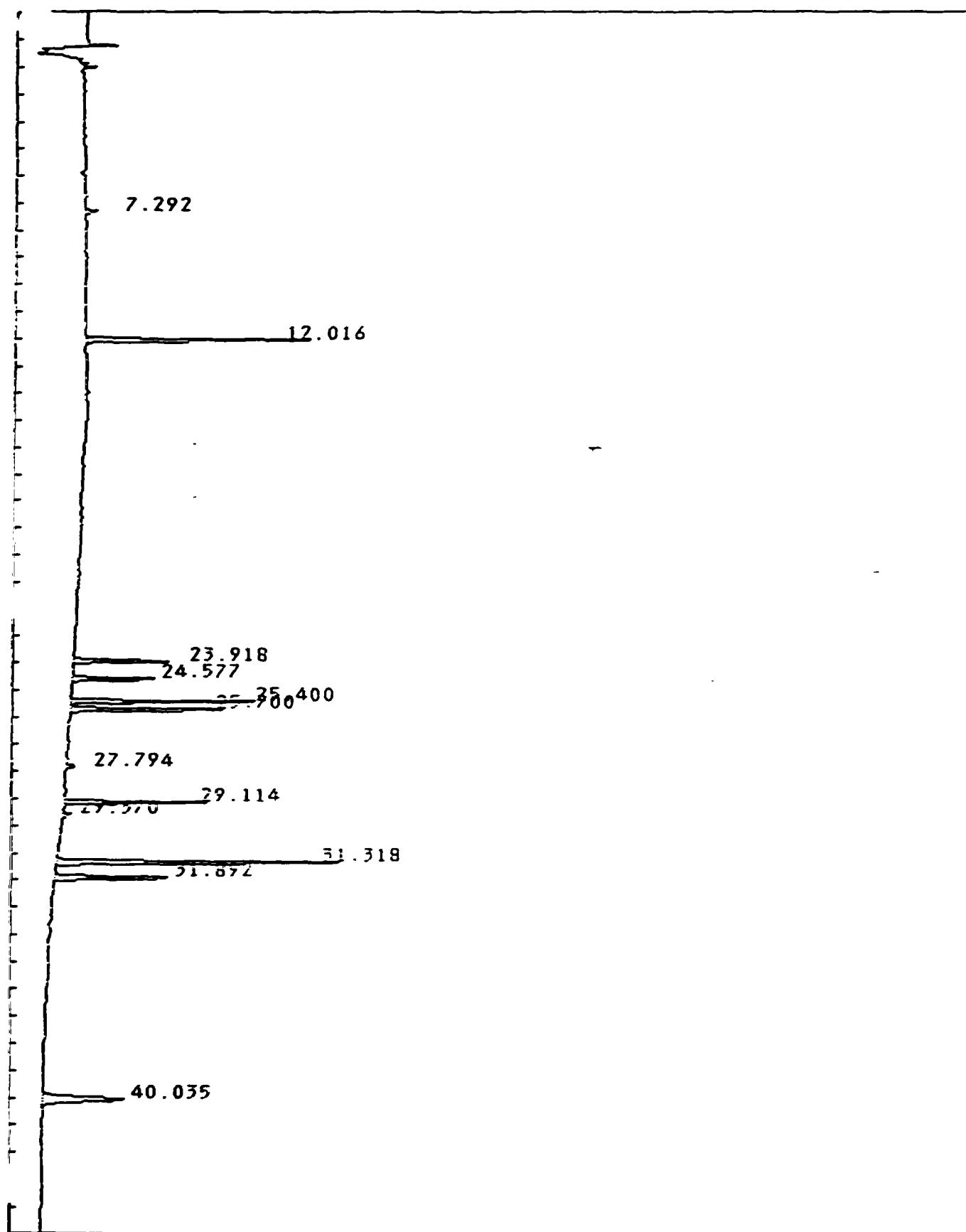
Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.088	4914	BB	0.00000	
2	12.02	#12.01	.085	89417	BB	.18600	Tetrachloro-m-xylene
	23.92	23.92	.091	43216	BB	.09382	gamma-Chlordane
	24.58	24.58	.089	39321	BB	.09620	Endosulfan I
5	25.40	25.40	.082	70922	BV	.19919	4,4'-DDE
6	25.70	25.70	.087	69764	VB	.18451	Dieldrin
7	27.79		.090	4208	BB	0.00000	
8	29.11	29.11	.083	55141	BB	.18829	Endosulfan sulfate
9	29.57		.078	2727	BB	0.00000	
10	31.32	31.32	.104	136364	BB	.95640	Methoxychlor
11	31.89	31.89	.110	62707	BB	.18993	Endrin ketone
2	40.04	#40.03	.209	72743	BB	.16765	Decachlorobiphenyl

Total Area : 651444 Total PPB : 2.262

Report Time : 1131 02Sep1997  
 Method : /METHOD/P3082897CLP.MTH  
 Result File : /RESULT/P3082897\_003.RES

Sample Name : RESC89 Inj on 2127 28Aug1997  
Result File : /RESULT/P3082897\_003.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : PEM1I Report No : 796.010  
 Result File : /RESULT/P3082897\_004.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 45.98 Mins. Injected on 2222 28Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 1/ 4 Bottle no. : 4

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

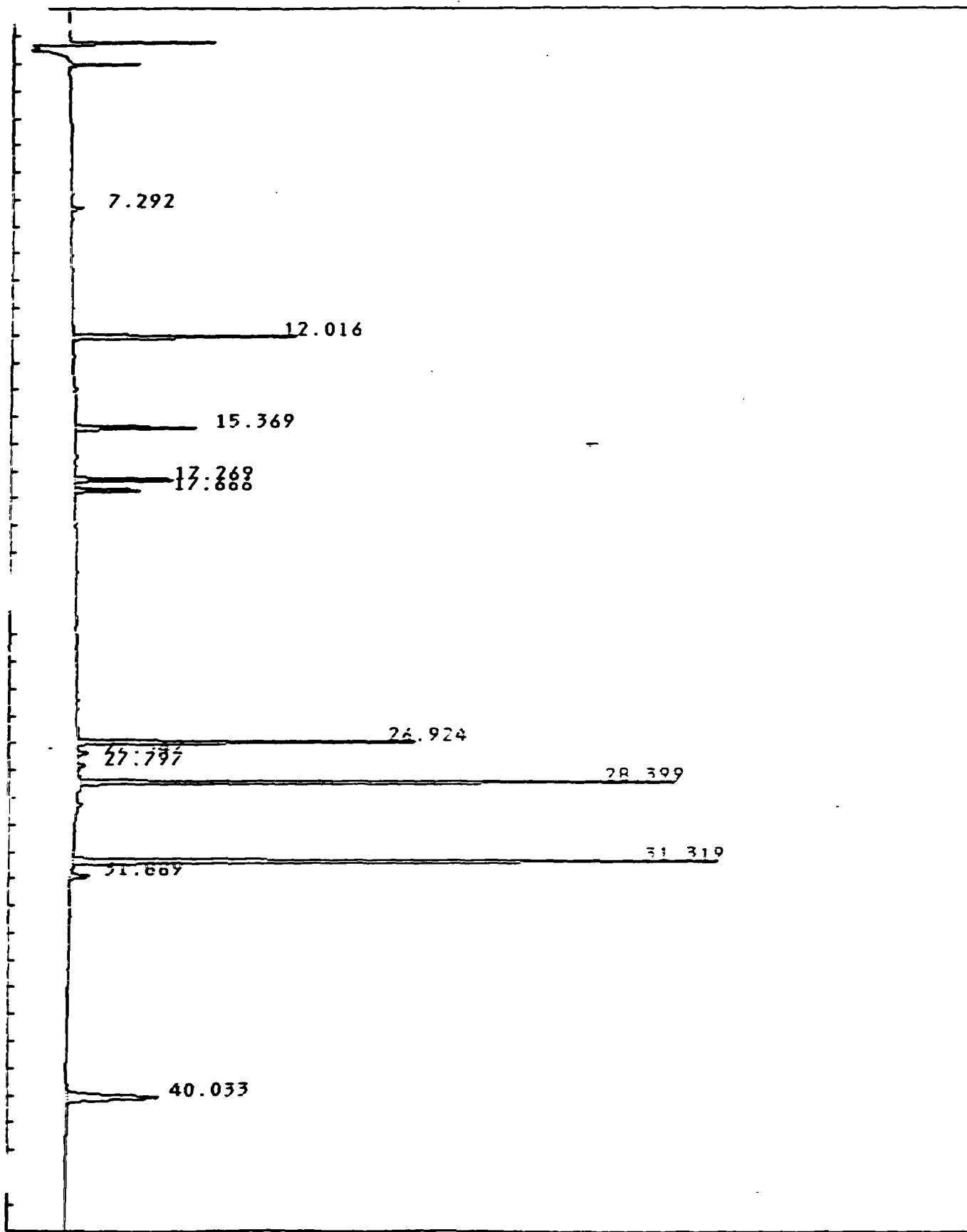
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.088	5235	BB	0.00000	
2	12.02	#12.01	.086	92564	BB	.19255	Tetrachloro-m-xylene
	15.37	15.37	.087	53182	BB	.10283	alpha-BHC
	17.27	17.27	.090	52269	BB	.10220	gamma-BHC (Lindane)
5	17.67	17.66	.088	32650	BB	.10595	beta-BHC
6	26.92	26.92	.083	137091	BB	.46108	Endrin
7	27.34	27.34	.107	5313	BB	.01929	4,4'-DDD
8	27.80		.107	4103	BB	0.00000	
9	28.40	28.40	.077	260012	BV	.90790	4,4'-DDT
10	31.32	31.32	.105	327789	BV	2.29896	Methoxychlor
11	31.89	31.89	.127	11910	BB	.03607	Endrin ketone
12	40.03	#40.03	.211	85040	BB	.19599	Decachlorobiphenyl

Total Area : 1067157 Total PPB : 4.423

Report Time : 1139 02Sep1997  
 Method : /METHOD/P3082897CLP.MTH  
 Result File : /RESULT/P3082897\_004.RES

IEA Pesticide Standard Report

Sample Name : PEM1I Inj on 2222 28Aug1997  
Result File : /RESULT/P3082897\_004.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR166016 Report No : 797.000  
 Result File : /RESULT/P3082897\_005.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HF5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.02 Mins. Injected on 2318 28Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 2/ 1 Bottle no. : 1

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.02	12.02	.087	106558	BB	.20398	Tetrachloro-m-xylene
2	13.97		.146	5692	BB	0.00000	
3	14.69		.087	2954	BB	0.00000	
4	15.02		.089	14809	BV	0.00000	
5	17.12		.111	33681	BB	0.00000	
6	18.13		.100	9447	BV	0.00000	
7	18.41		.139	17678	UV	0.00000	
8	18.66		.091	3559	VB	0.00000	
9	19.05		.139	63802	BB	0.00000	
10	19.75		.105	23849	BV	0.00000	
11	20.33		.093	15591	UV	0.00000	
12	20.63		.100	17474	PV	0.00000	
13	20.84		.124	19179	UV	0.00000	
14	20.97		.082	5082	UV	0.00000	
15	21.09		.089	5453	UV	0.00000	
16	21.97		.099	21673	BV	0.00000	
17	22.14		.087	6819	VB	0.00000	
18	22.41		.080	4800	BV	0.00000	
19	22.52		.088	10029	UV	0.00000	
20	22.65		.086	3808	VB	0.00000	
21	23.23		.106	6360	UV	0.00000	
22	23.69		.087	14226	PV	0.00000	
23	24.11		.087	16690	VB	0.00000	
24	25.56		.076	3378	BB	0.00000	
25	26.02		.124	23888	BV	0.00000	
26	26.14		.084	6343	UV	0.00000	
27	26.27		.114	8581	UV	0.00000	
28	26.61		.096	36417	PV	0.00000	
29	26.83		.080	5885	UV	0.00000	
30	27.06		.087	39974	UV	0.00000	
31	27.71		.079	13996	BV	0.00000	
32	27.97		.084	12342	UV	0.00000	
33	28.05		.071	6766	UV	0.00000	
34	28.30		.094	20928	UV	0.00000	
35	28.44		.083	31931	UV	0.00000	
36	28.64		.086	22104	UV	0.00000	
37	28.83		.091	13313	VB	0.00000	

IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	29.29		.082	3325	BB	0.00000	
39	29.78		.091	22053	BV	0.00000	
40	30.10		.102	17529	FU	0.00000	
41	30.30		.078	4129	UU	0.00000	
42	30.43		.096	44707	UU	0.00000	
43	32.07		.114	13893	BU	0.00000	
44	32.30		.140	30558	VB	0.00000	
45	34.65		.153	5319	BB	0.00000	
46	35.10		.152	11941	BB	0.00000	
47	40.03	#40.03	.215	98383	BB	.17617	Decachlorobiphenyl

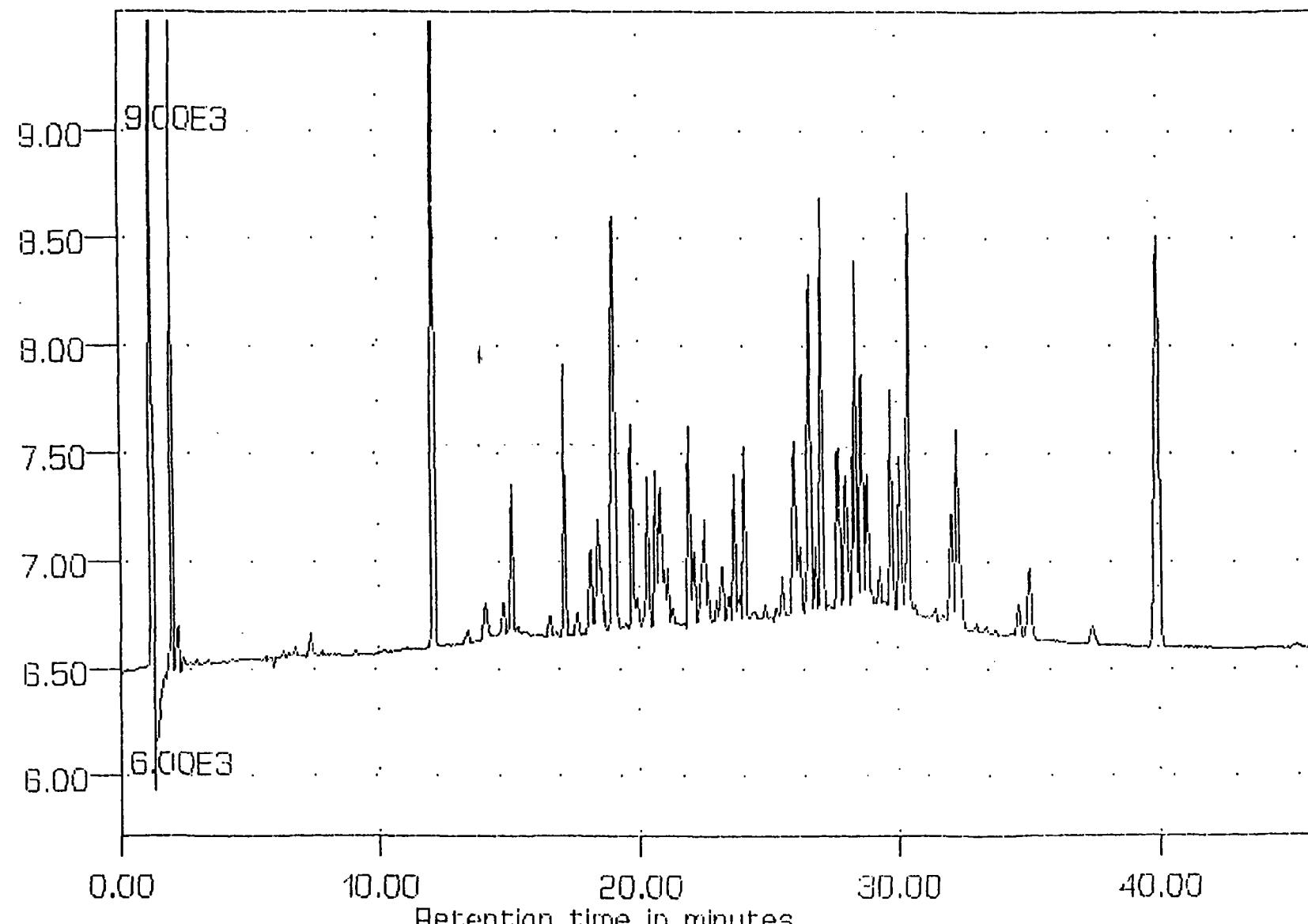
Total Area : 926898 Total PPB : .380

Report Time : 0008 29Aug1997  
Method : /METHOD/P3M082897CLP.MTH  
Result File : /RESULT/P3082897\_005.RES

Sample : AR168016

Inj. On :

2318 28Aug1997



Result : P3082897\_205

Method : P3082897CLP

IEA Pesticide Standard Report

Sample Name : AR166016

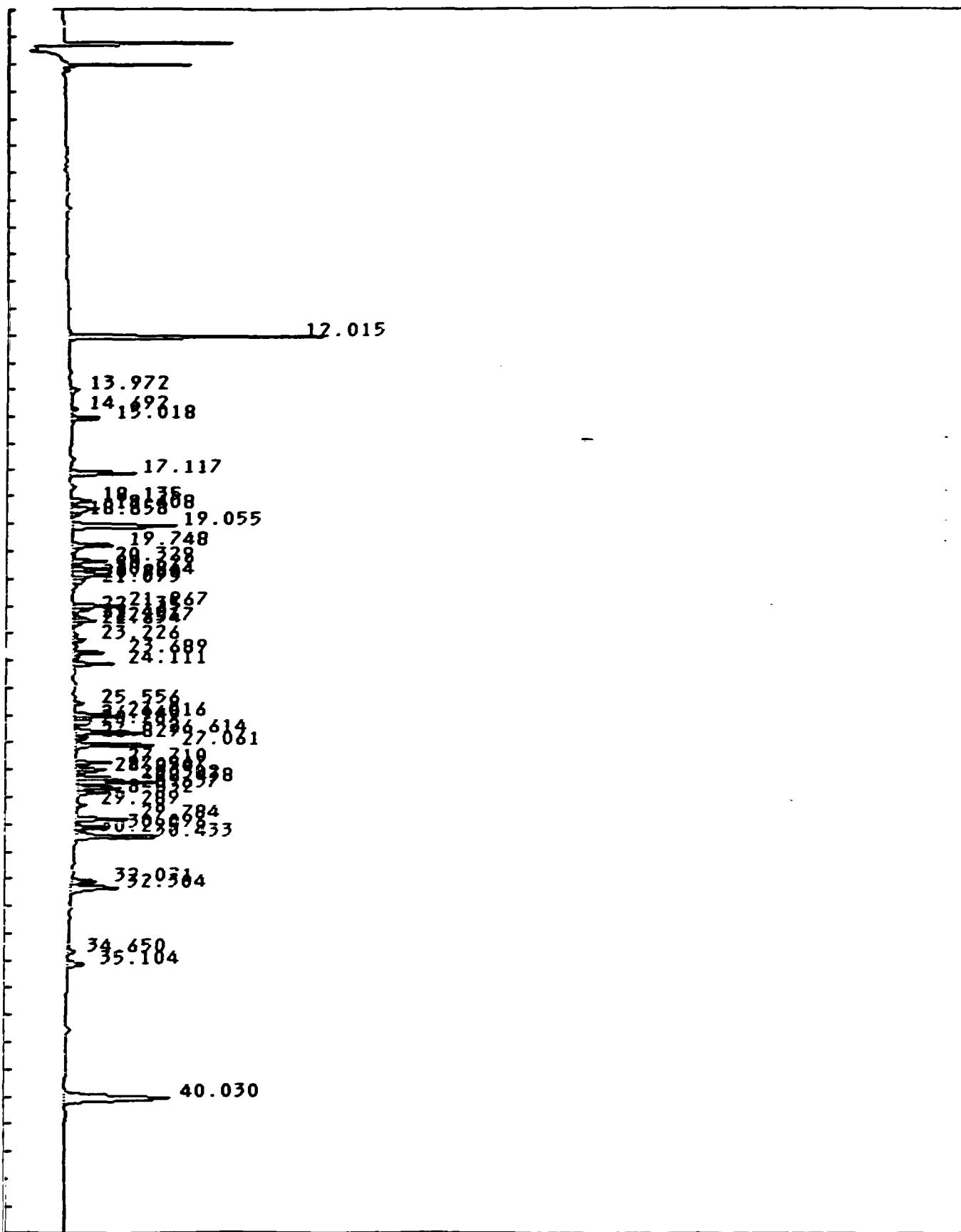
Inj on 2318 28Aug1997

Result File : /RESULT/P3082897\_005.RES

INSTRUMENT : HP5890P3

Column Type : RTX-35 30-Meter, 0.53mm ID

Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR122116 Report No : 798.000  
Result File : /RESULT/P3082897\_006.RES  
Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 45.98 Mins. Injected on 0014 29Aug1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 2/ 2 Bottle no. : 2

% Dil-Fact  
100.00

Run Status : RunStatusOK

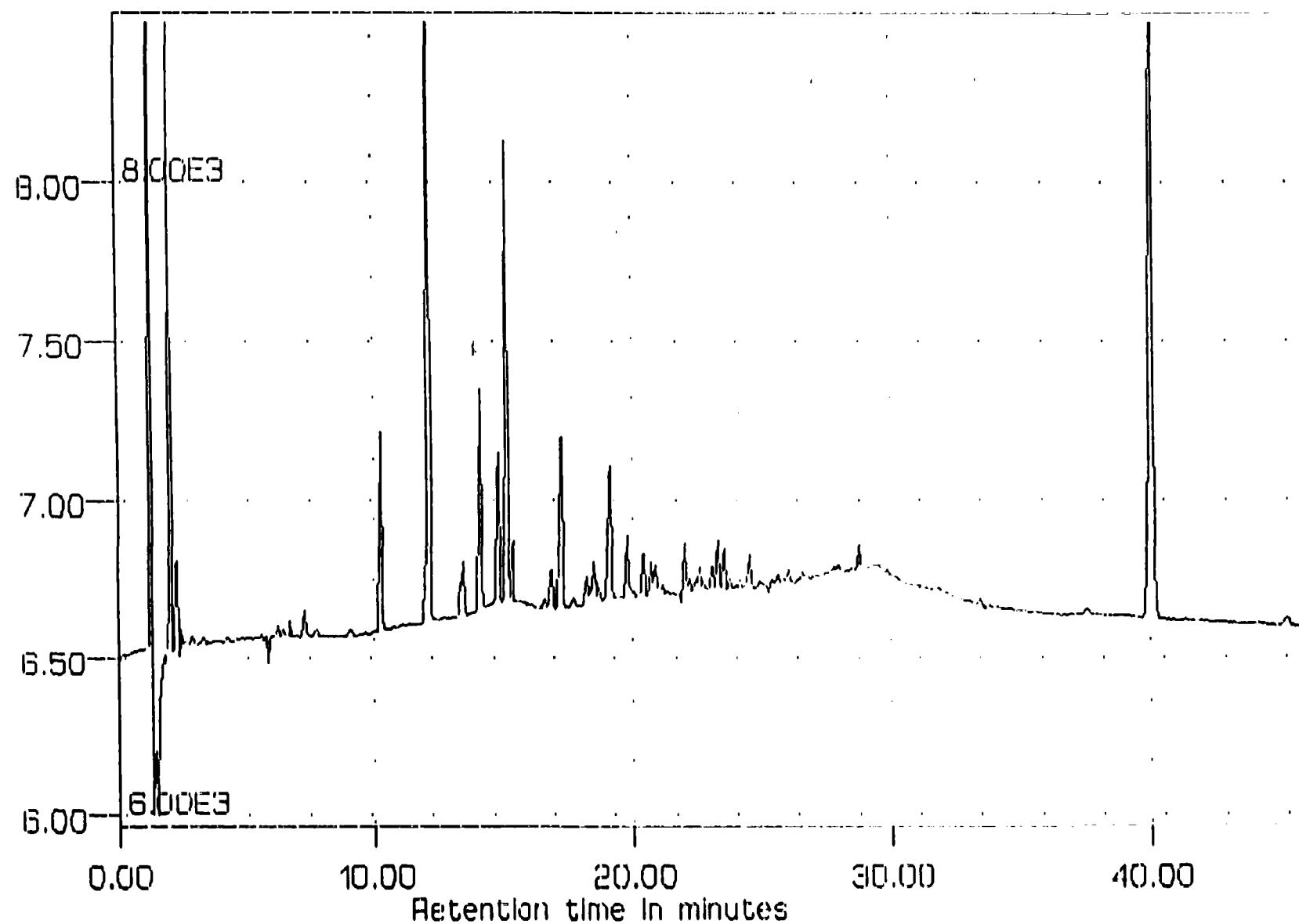
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	10.17		.083	12542	BB	0.00000	
2	11.88		.072	3704	BV	0.00000	
3	12.02	12.02	.086	114823	VB	.21980	Tetrachloro-m-xylene
4	13.36		.090	3685	VB	0.00000	
5	13.98		.096	15994	BB	0.00000	
6	14.69		.089	10141	BB	0.00000	
7	15.02		.091	31868	BV	0.00000	
8	15.24		.086	4127	VB	0.00000	
9	17.13		.105	13604	BB	0.00000	
10	19.06		.135	13568	BB	0.00000	
11	19.75		.095	4396	BB	0.00000	
12	20.33		.087	2839	BB	0.00000	
13	21.97		.082	2890	BV	0.00000	
14	23.24		.088	3131	BV	0.00000	
15	40.03	#40.03	.212	106089	BB	.18996	Decachlorobiphenyl

Total Area : 343402 Total PPB : .410

Report Time : 0103 29Aug1997  
Method : /METHOD/P3M082897CLP.MTH  
Result File : /RESULT/P3082897\_006.RES

Sample : AR122116

Inj. Dn : 0014 29Aug1997

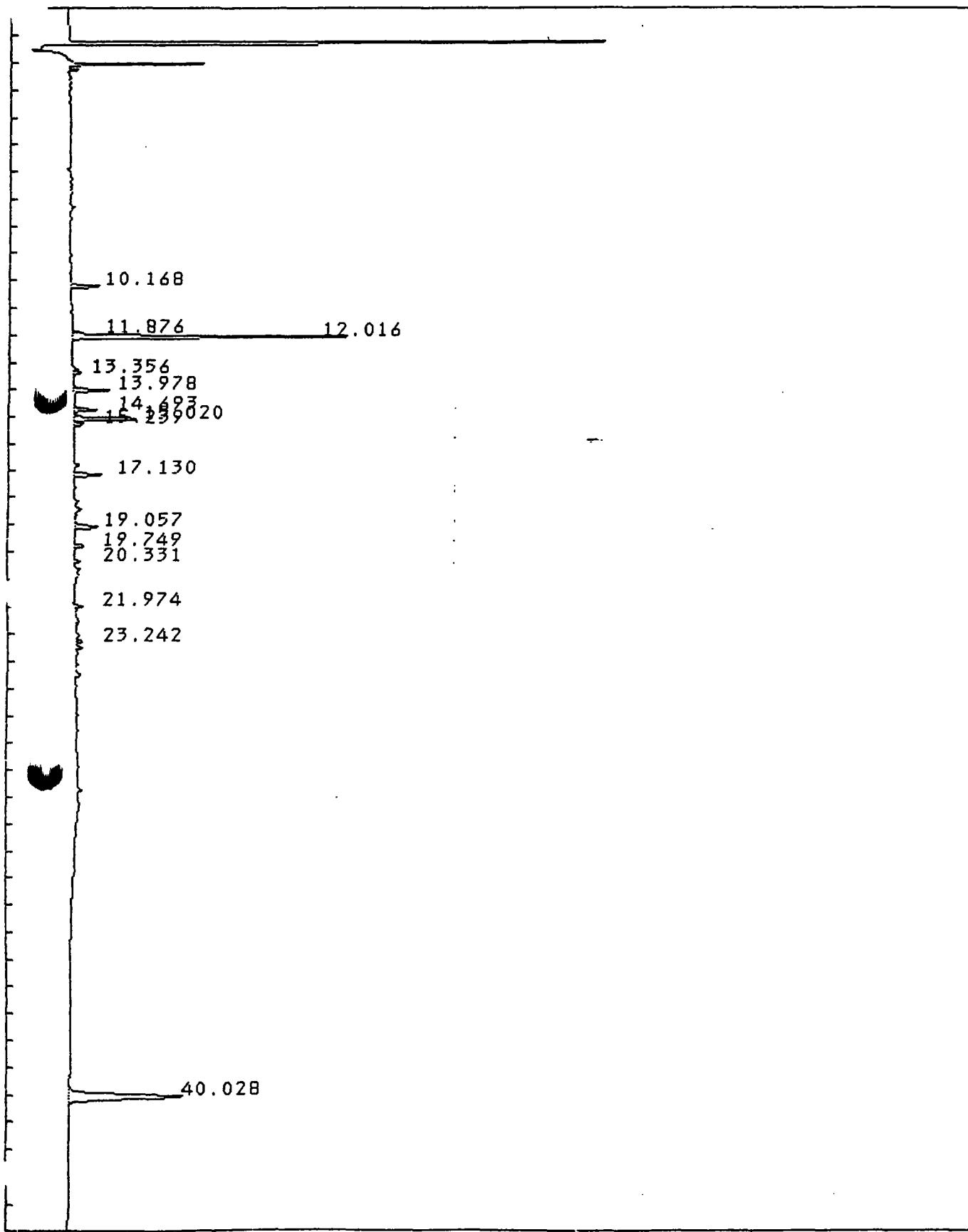


Result : P3082897\_006

Method : P3M002897CLP

IEA Pesticide Standard Report

Sample Name : AR122116 Inj on 0014 29Aug1997  
Result File : /RESULT/P3082897\_006.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



IEA Pesticide Standard Report

Sample Name : AR123216 Report No : 799.000  
Result File : /RESULT/P3082897\_007.RES  
Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 46.00 Mins. Injected on 0109 29Aug1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 2/ 3 Bottle no. : 3

% Dil-Fact  
100.00

Run Status : RunStatusOK

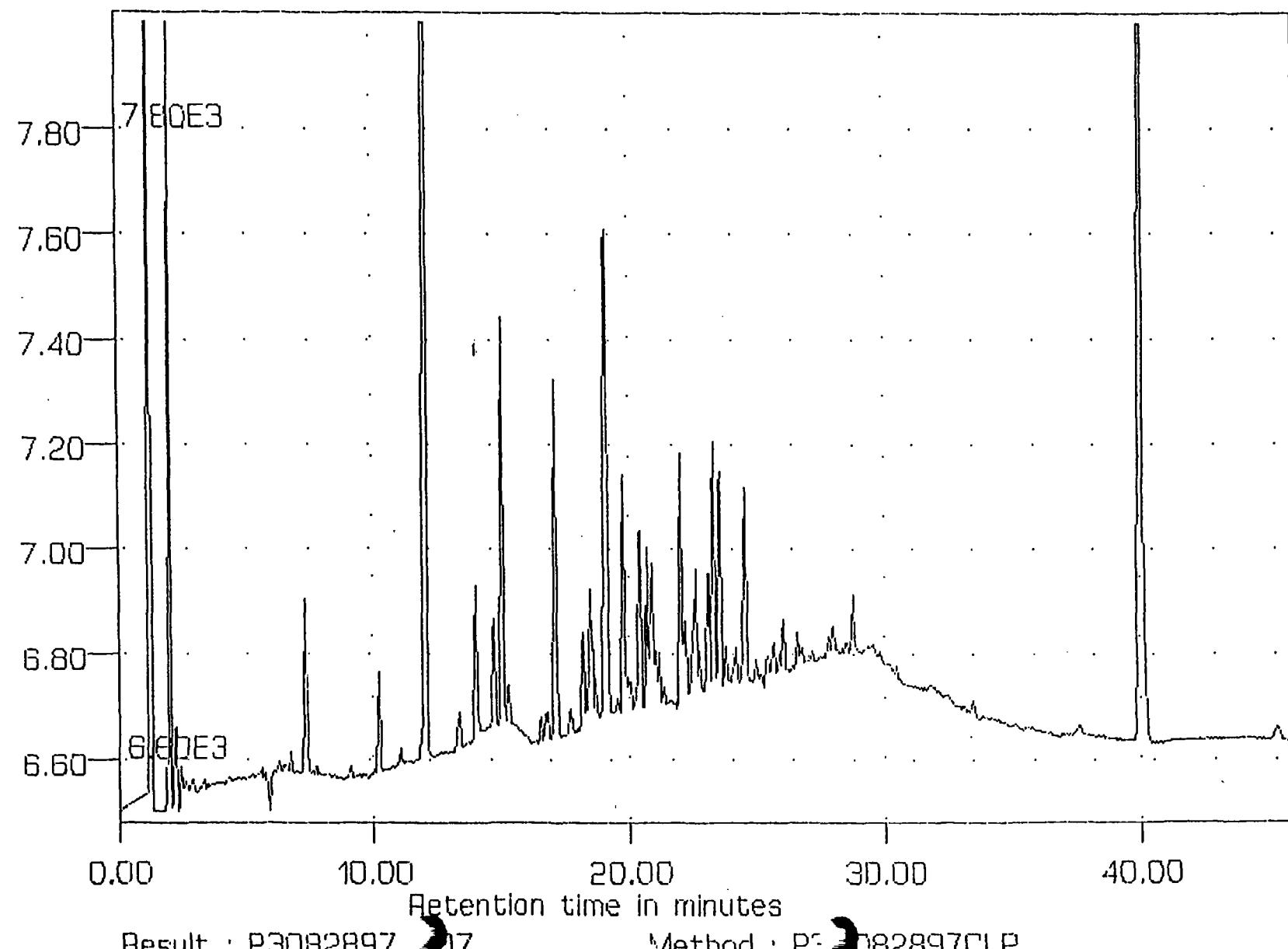
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.088	6955	BB	0.00000	
2	10.17		.081	3699	BB	0.00000	
3	12.02	12.02	.086	96699	VB	.18510	Tetrachloro-m-xylene
4	13.97		.099	6718	BB	0.00000	
5	14.69		.086	4197	BB	0.00000	
6	15.02		.089	16544	BU	0.00000	
7	17.12		.108	17702	BB	0.00000	
8	18.14		.092	3764	BB	0.00000	
9	18.41		.123	6886	BU	0.00000	
10	19.06		.135	30018	BB	0.00000	
11	19.75		.094	9779	BU	0.00000	
12	20.33		.095	7757	BU	0.00000	
13	20.63		.095	6332	PU	0.00000	
14	20.84		.098	4860	UU	0.00000	
15	21.97		.098	11101	BU	0.00000	
16	22.14		.085	2930	VB	0.00000	
17	22.52		.080	4093	UU	0.00000	
18	23.03		.083	4479	UU	0.00000	
19	23.24		.095	10665	UU	0.00000	
20	23.47		.083	8153	UU	0.00000	
21	24.47		.097	8602	BB	0.00000	
22	40.04	#40.03	.213	90734	BB	.16247	Decachlorobiphenyl

Total Area : 362666 Total PPB : .348

Report Time : 0159 29Aug1997  
Method : /METHOD/P3M082897CLP.MTH  
Result File : /RESULT/P3082897\_007.RES

Sample : AR123216

Inj. On : 0109 29Aug1997



IEA Pesticide Standard Report

Sample Name : AR123216

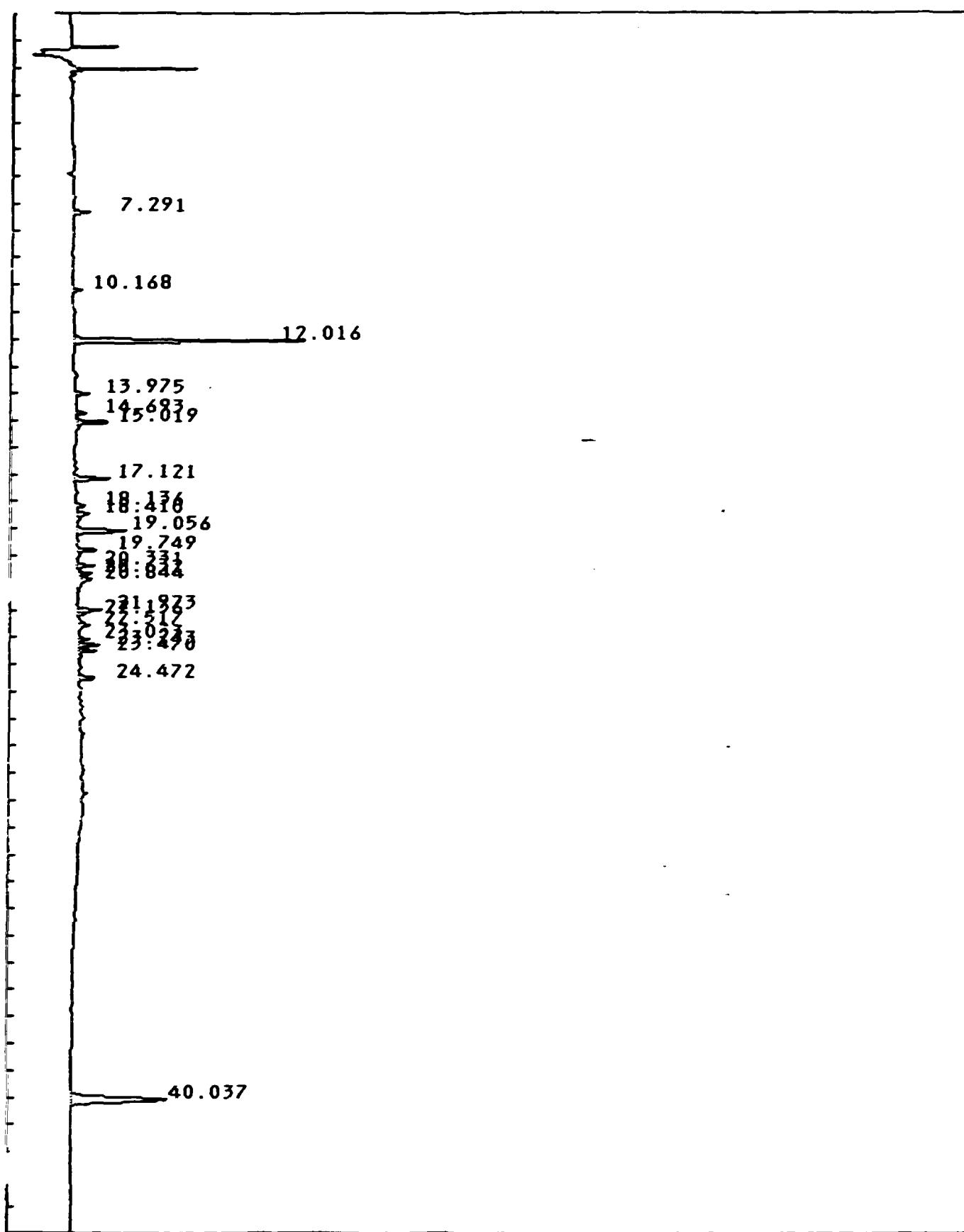
Inj on 0109 29Aug1997

Result File : /RESULT/P3082897\_007.RES

INSTRUMENT : HP5890P3

Column Type : RTX-35 30-Meter, 0.53mm ID

Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR124216 Report No : 800.000  
 Result File : /RESULT/P3082897\_008.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0205 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 2/ 4 Bottle no. : 4  
  
 % Dil-Fact  
 100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.088	5949	BB	0.00000	
2	12.02	12.02	.086	110494	BB	.21151	Tetrachloro-m-xylene
3	13.97		.101	3932	BB	0.00000	
4	14.69		.086	2623	BB	0.00000	
5	15.02		.089	12263	BV	0.00000	
6	17.12		.109	22842	BB	0.00000	
7	18.14		.093	5541	BV	0.00000	
8	18.41		.126	9978	VV	0.00000	
9	19.06		.137	43039	BB	0.00000	
10	19.75		.092	13352	BV	0.00000	
11	20.33		.097	11075	BB	0.00000	
12	20.63		.094	10378	BV	0.00000	
13	20.85		.098	7785	VV	0.00000	
14	21.97		.100	17456	BV	0.00000	
15	22.14		.086	4721	V <sub>B</sub>	0.00000	
16	22.41		.075	3054	BV	0.00000	
17	22.52		.081	6875	VV	0.00000	
18	23.03		.084	7839	VV	0.00000	
19	23.24		.095	17807	VV	0.00000	
20	23.47		.084	13606	VV	0.00000	
21	23.69		.082	3024	VV	0.00000	
22	24.11		.110	4348	BB	0.00000	
23	24.47		.102	14905	BB	0.00000	
24	25.56		.077	2492	BB	0.00000	
25	25.95		.091	5326	V <sub>B</sub>	0.00000	
26	26.52		.058	2306	BV	0.00000	
27	27.89		.096	3169	BB	0.00000	
28	40.04	#40.03	.212	104152	BB	.18650	Decachlorobiphenyl

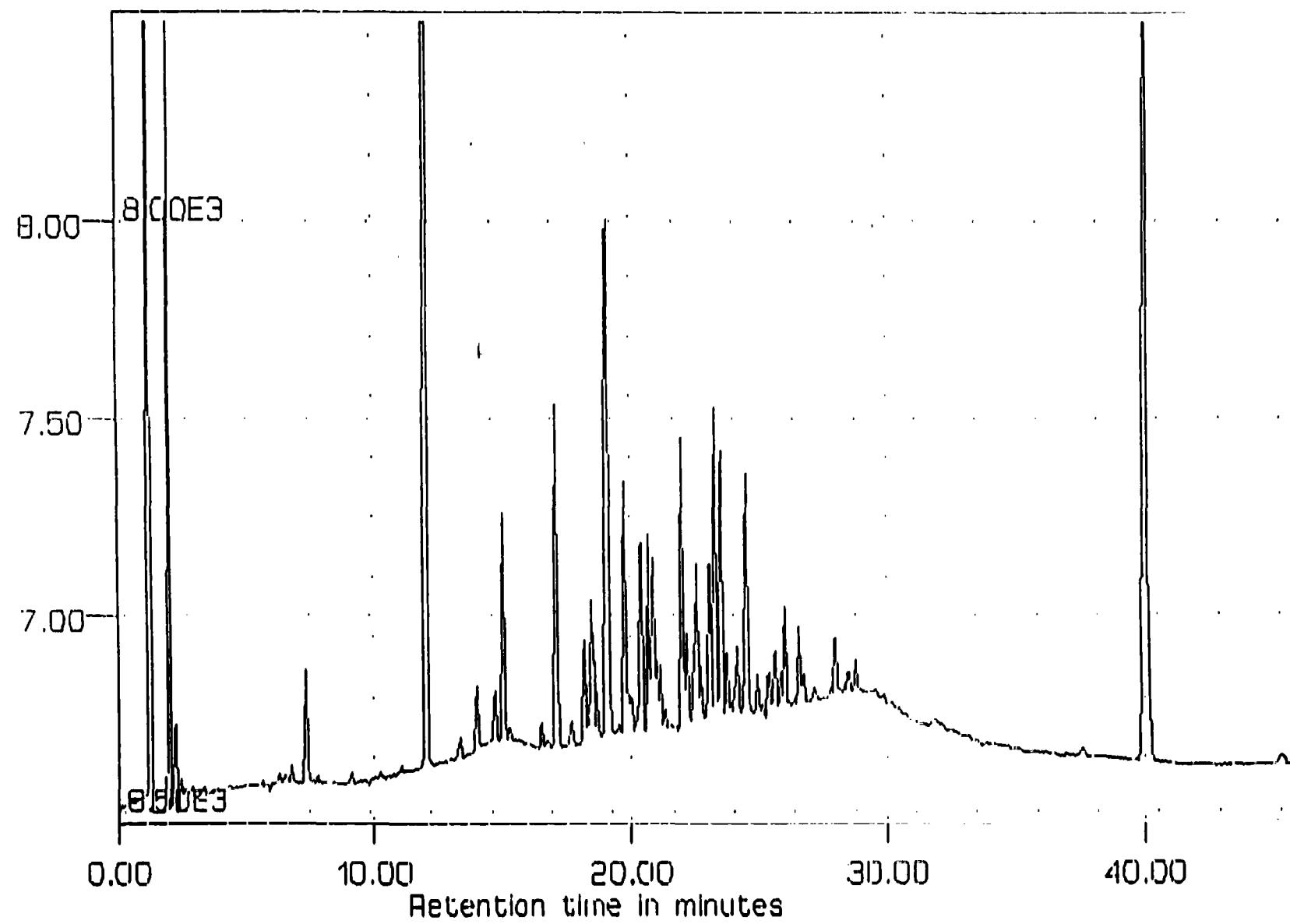
Total Area : 470330 Total PPB : .398

Report Time : 0255 29Aug1997  
 Method : /METHOD/P3M082897CLP.MTH  
 Result File : /RESULT/P3082897\_008.RES

Sample : AP124216

Inj. On :

0205 29Aug1997

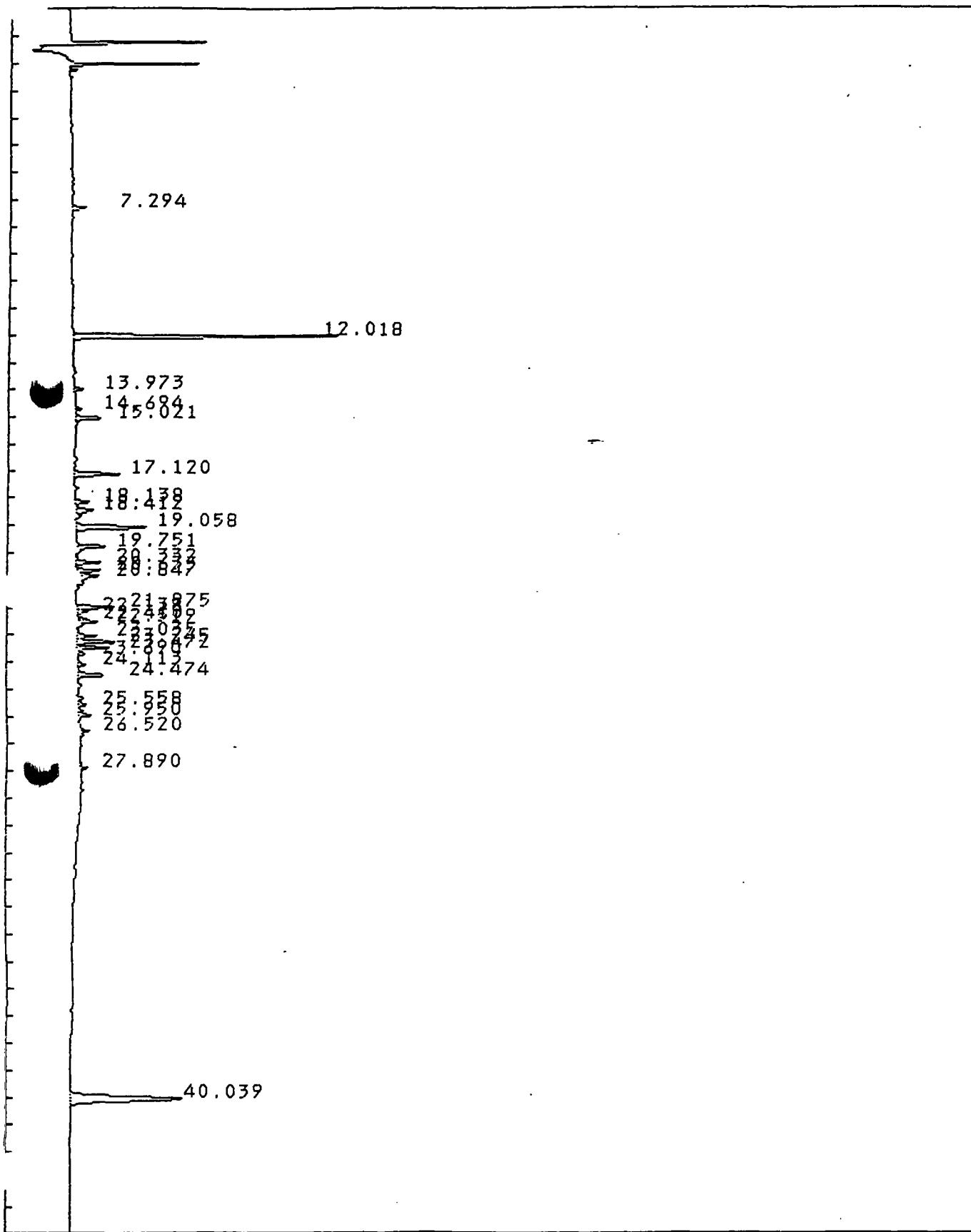


Result : P3082897\_008

Method : P3M082897CLP

IEA Pesticide Standard Report

Sample Name : AR124216 Inj on 0205 29Aug1997  
Result File : /RESULT/P3082897\_008.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR124816 Report No : 801.000  
 Result File : /RESULT/P3082897\_009.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0300 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 2/ 5 Bottle no. : 5

x Dil-Fact  
 100.00

Run Status : RunStatusOK

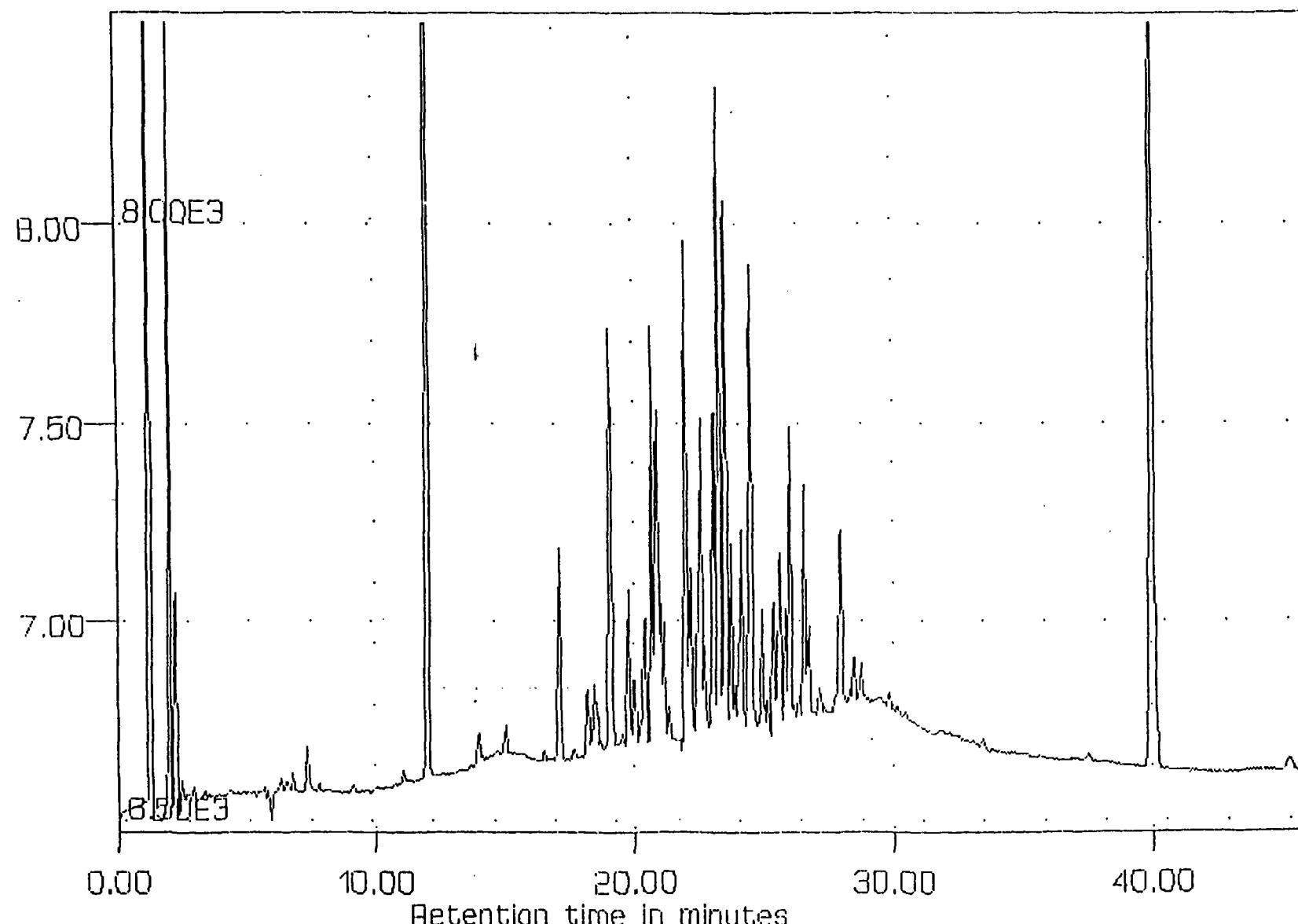
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.02	12.01	.087	110492	BB	.21151	Tetrachloro-m-xylene
2	17.11		.105	13256	BB	0.00000	
3	18.13		.088	3316	BU	0.00000	
4	18.41		.124	4654	UB	0.00000	
5	19.04		.139	34950	BB	0.00000	
6	19.75		.094	8792	BU	0.00000	
7	19.96		.099	3789	UU	0.00000	
8	20.33		.091	6699	UB	0.00000	
9	20.63		.101	25313	BU	0.00000	
10	20.84		.118	23326	UU	0.00000	
11	20.97		.083	6629	UU	0.00000	
12	21.09		.089	6066	UU	0.00000	
13	21.97		.095	28451	BU	0.00000	
14	22.14		.087	8594	UB	0.00000	
15	22.41		.078	6984	BU	0.00000	
16	22.52		.090	16875	UU	0.00000	
17	22.65		.083	4053	UB	0.00000	
18	23.03		.086	16394	UU	0.00000	
19	23.24		.096	37283	UU	0.00000	
20	23.47		.087	27715	UU	0.00000	
21	23.69		.089	9832	UU	0.00000	
22	24.00		.074	2934	UU	0.00000	
23	24.11		.092	10924	UU	0.00000	
24	24.47		.114	31888	UB	0.00000	
25	24.87		.094	6664	BU	0.00000	
26	25.31		.079	5499	PB	0.00000	
27	25.56		.076	7095	BU	0.00000	
28	25.78		.079	5186	PV	0.00000	
29	25.95		.092	16205	UB	0.00000	
30	26.52		.085	11761	UU	0.00000	
31	26.68		.088	4590	UB	0.00000	
32	27.89		.083	8766	UB	0.00000	
33	40.03 #40.03		.213	105417	BB	.18876	Decachlorobiphenyl

Total Area : 620392 Total PPB : .400

Report Time : 0351 29Aug1997  
 Method : /METHOD/P3M082897CLP.MTH  
 Result File : /RESULT/P3082897\_009.RES

Sample : AR124816

Inj. On : 0300 29Aug1997

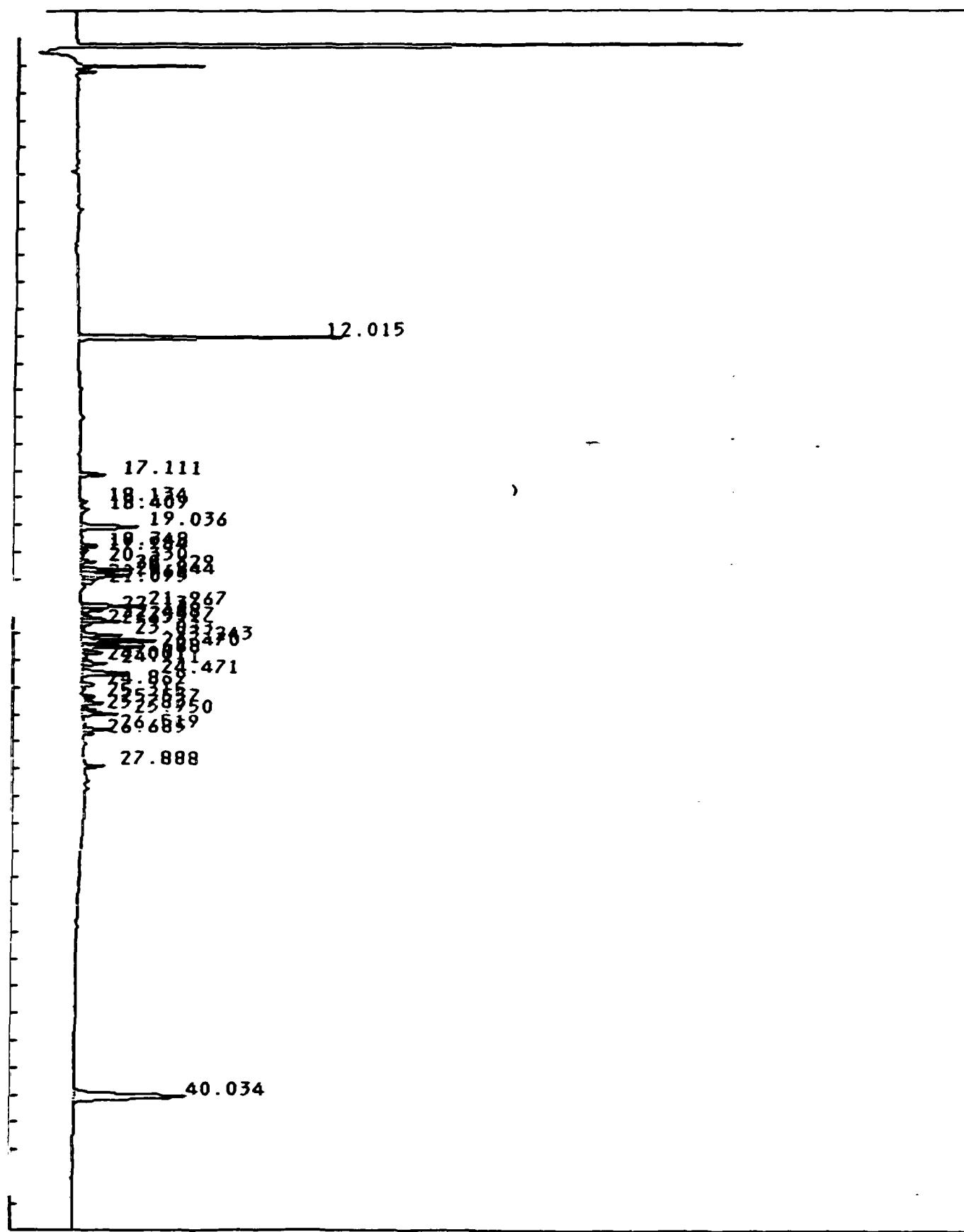


Result : P3082897\_09

Method : P3082897CLP

## IEA Pesticide Standard Report

Sample Name : AR124816 Inj on 0300 29Aug1997  
Result File : /RESULT/P3082897\_009.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : AR125416 Report No : 802.000  
 Result File : /RESULT/P3082897\_010.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0356 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 2/ 6 Bottle no. : 6

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.090	3770	BB	0.00000	
2	12.01	12.01	.087	105911	BB	.20274	Tetrachloro-m-xylene
3	20.63		.097	17467	BV	0.00000	
4	20.84		.088	3820	UV	0.00000	
5	21.97		.088	9115	BV	0.00000	
6	22.52		.094	3226	BB	0.00000	
7	23.03		.082	3597	BV	0.00000	
8	23.25		.088	15518	UV	0.00000	
9	23.47		.082	4699	UV	0.00000	
10	23.69		.089	25197	UV	0.00000	
11	23.86		.084	6615	UV	0.00000	
12	24.11		.100	35717	UV	0.00000	
13	24.37		.098	15399	UV	0.00000	
14	24.87		.087	10503	BV	0.00000	
15	25.31		.094	12813	PV	0.00000	
16	25.56		.088	21175	UV	0.00000	
17	25.78		.081	6635	UV	0.00000	
18	25.95		.091	41407	UV	0.00000	
19	26.12		.101	4894	UV	0.00000	
20	26.29		.130	5871	UV	0.00000	
21	26.52		.089	33056	UV	0.00000	
22	26.61		.094	18126	UV	0.00000	
23	26.83		.081	3448	UV	0.00000	
24	27.06		.092	19685	PV	0.00000	
25	27.71		.077	5504	BV	0.00000	
26	27.89		.081	14741	UV	0.00000	
27	27.96		.085	11631	UV	0.00000	
28	28.30		.096	9374	UV	0.00000	
29	28.44		.081	25933	UV	0.00000	
30	28.85		.064	1712	PV	0.00000	
31	29.80		.089	8505	BB	0.00000	
32	30.11		.091	5658	BV	0.00000	
33	30.44		.115	4755	UV	0.00000	
34	40.03	#40.03	.215	100826	BB	.18054	Decachlorobiphenyl

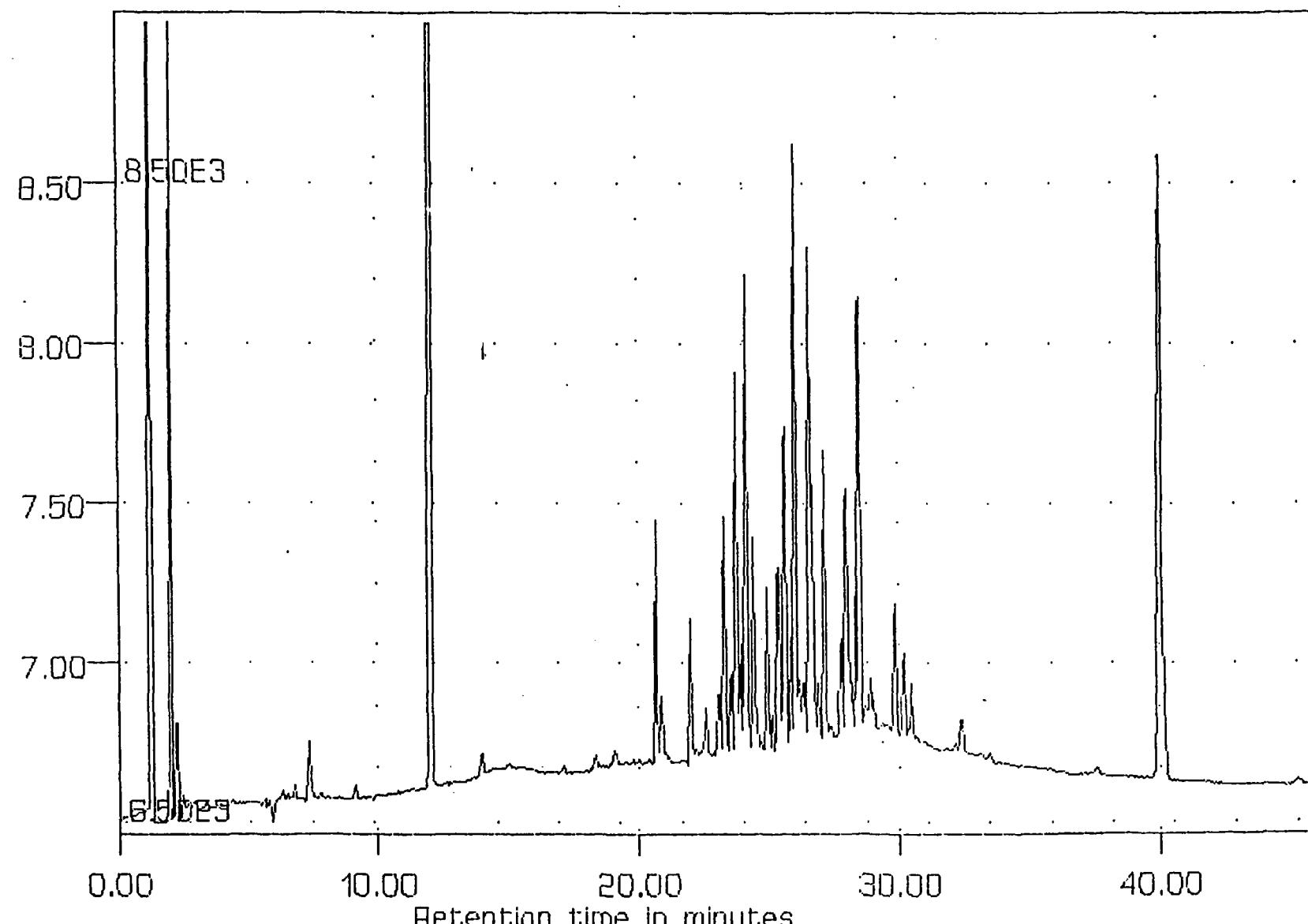
Total Area : 616302 Total PPB : .383

Report Time : 0446 29Aug1997  
 Method : /METHOD/P3M082897CLP.MTH

Sample : AR125416

Inj. On :

0356 29Aug1997

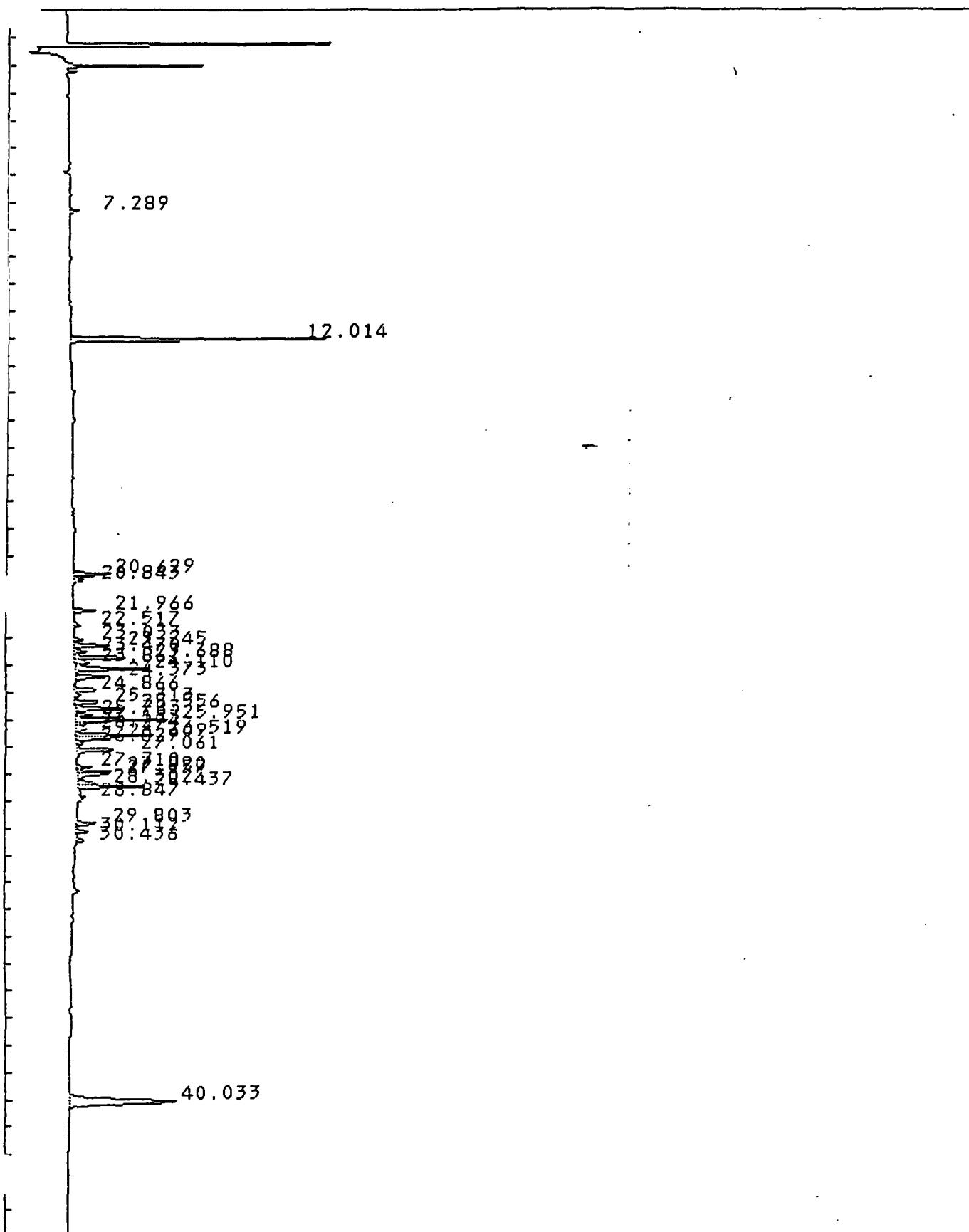


Result : P3082897\_

Method : P3I 82897CLP

IEA Pesticide Standard Report

Sample Name : AR125416 Inj on 0356 29Aug1997  
Result File : /RESULT/P3082897\_010.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : TOXAPH16 Report No : 803.000  
 Result File : /RESULT/P3082897\_011.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0452 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 2 / 7 Bottle no. : 7

% Dil-Fact  
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.092	5403	BB	0.00000	
2	12.02	12.01	.087	143975	BB	.27560	Tetrachloro-m-xylene
3	13.96		.093	2710	BB	0.00000	
4	15.37		.082	2891	BB	0.00000	
5	22.15		.081	3029	VU	0.00000	
6	22.24		.098	5843	VB	0.00000	
7	23.19		.141	2738	PV	0.00000	
8	23.33		.085	2843	VB	0.00000	
9	23.83		.088	3969	VU	0.00000	
10	24.03		.115	11587	VU	0.00000	
11	24.19		.110	11467	VU	0.00000	
12	24.54		.281	13316	VU	0.00000	
13	24.89		.109	7037	VU	0.00000	
14	25.06		.135	15450	VU	0.00000	
15	25.41		.107	18972	VU	0.00000	
16	25.62		.156	41792	VU	0.00000	
17	25.88		.153	35455	VU	0.00000	
18	26.11		.111	18329	VU	0.00000	
19	26.38		.167	57047	VU	0.00000	
20	26.49		.129	48316	VU	0.00000	
21	26.65		.151	34312	VU	0.00000	
22	26.84		.156	26491	VU	0.00000	
23	27.12		.127	49891	VU	0.00000	
24	27.26		.131	31701	VU	0.00000	
25	27.44		.129	59132	VU	0.00000	
26	27.79		.193	138473	VU	0.00000	
27	28.12		.165	48013	VU	0.00000	
28	28.37		.190	69411	VU	0.00000	
29	28.60		.107	62435	VU	0.00000	
30	28.69		.093	44455	VU	0.00000	
31	28.85		.095	49078	VU	0.00000	
32	28.94		.116	63868	VU	0.00000	
33	29.08		.104	31879	VU	0.00000	
34	29.25		.085	22673	VU	0.00000	
35	29.36		.131	77280	VU	0.00000	
36	29.54		.162	60286	VU	0.00000	
37	29.83		.133	38782	VU	0.00000	

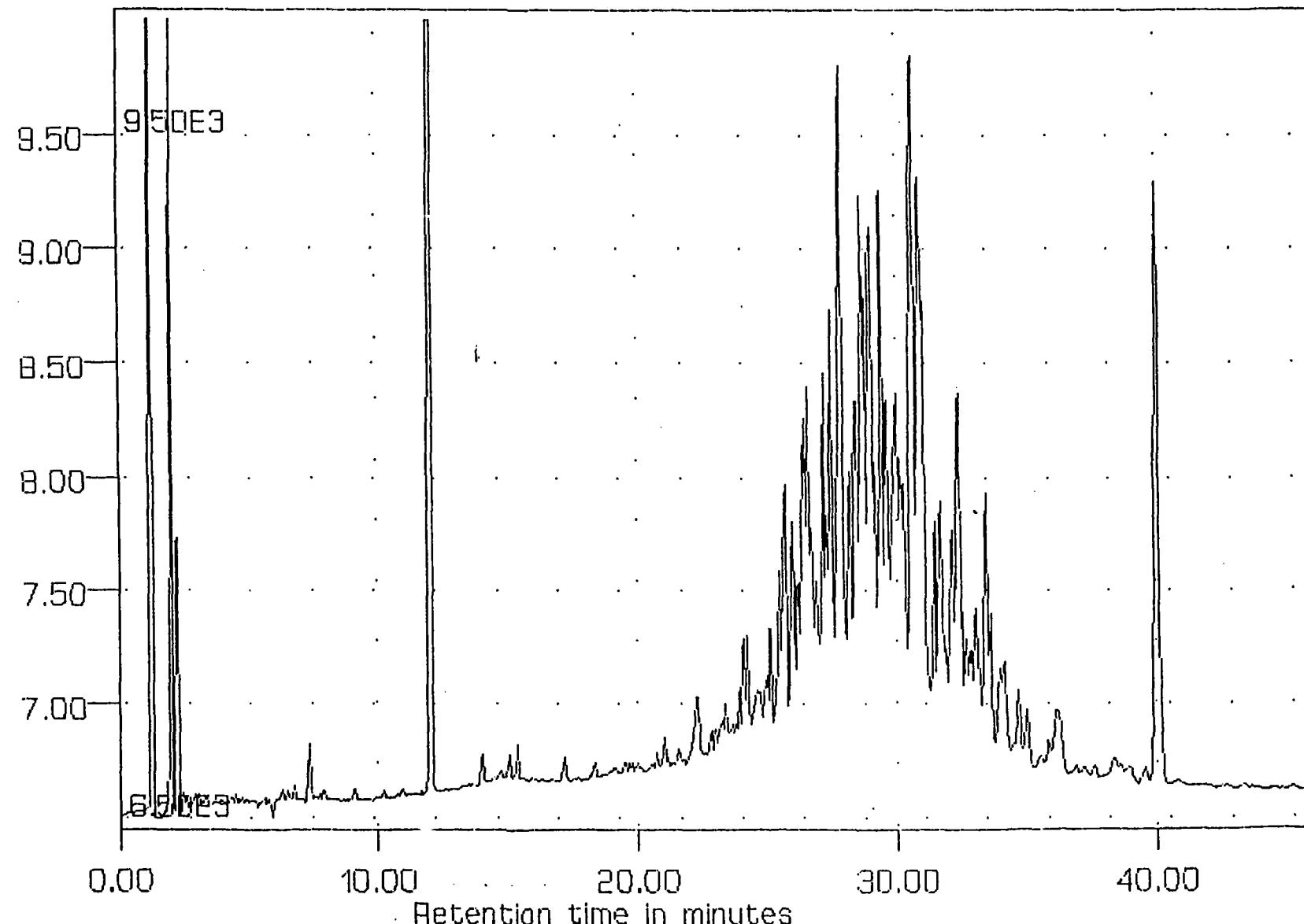
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	29.93		.122	46458	VV	0.00000	
39	30.05		.092	28491	VV	0.00000	
40	30.15		.185	53245	VV	0.00000	
1	30.59		.193	141997	VV	0.00000	
42	30.84		.165	100645	VV	0.00000	
43	30.96		.149	71608	VV	0.00000	
44	31.40		.150	37431	VV	0.00000	
45	31.66		.187	50441	VV	0.00000	
46	31.83		.110	12734	VV	0.00000	
47	32.09		.184	44654	VV	0.00000	
48	32.32		.152	58935	VV	0.00000	
49	32.47		.114	17786	VV	0.00000	
50	32.65		.138	17558	VV	0.00000	
51	32.81		.140	16172	VV	0.00000	
52	33.00		.168	27080	VV	0.00000	
53	33.38		.157	45016	VV	0.00000	
54	33.58		.157	24750	VV	0.00000	
55	33.96		.177	17815	VV	0.00000	
56	34.10		.164	17834	VV	0.00000	
57	34.63		.230	18665	VV	0.00000	
58	34.99		.178	10694	VB	0.00000	
59	36.13		.320	21015	VB	0.00000	
60	40.03	#40.03	.218	137961	VB	.24703	Decachlorobiphenyl

Total Area : 2379308 Total PPB : .523

Report Time : 0543 29Aug1997  
 Method : /METHOD/P3M082897CLP.MTH  
 Result File : /RESULT/P3082897\_011.RES

Sample : TOXAPH16

Inj. On : 0452 29Aug1997



Result : P3082897.31

Method : P3'82897CLP

IEA Pesticide Standard Report

Sample Name : TOXAPH16 Inj on 0452 29Aug1997  
Result File : /RESULT/P3082897\_011.RES INSTRUMENT : HP5890F3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL

7.291

12.016

13.956

15.368

22.239

22.240

22.241

22.242

22.243

22.244

22.245

22.246

22.247

22.248

22.249

22.250

22.251

22.252

22.254

22.256

22.258

22.260

22.262

22.264

22.266

22.268

22.270

22.272

22.274

22.276

22.278

22.280

22.282

22.284

22.286

22.288

22.290

22.292

22.294

22.296

22.298

22.300

22.302

22.304

22.306

22.308

22.310

22.312

22.314

22.316

22.318

22.320

22.322

22.324

22.326

22.328

22.330

22.332

22.334

22.336

22.338

22.340

22.342

22.344

22.346

22.348

22.350

22.352

22.354

22.356

22.358

22.360

22.362

22.364

22.366

22.368

22.370

22.372

22.374

22.376

22.378

22.380

22.382

22.384

22.386

22.388

22.390

22.392

22.394

22.396

22.398

22.400

22.402

22.404

22.406

22.408

22.410

22.412

22.414

22.416

22.418

22.420

22.422

22.424

22.426

22.428

22.430

22.432

22.434

22.436

22.438

22.440

22.442

22.444

22.446

22.448

22.450

22.452

22.454

22.456

22.458

22.460

22.462

22.464

22.466

22.468

22.470

22.472

22.474

22.476

22.478

22.480

22.482

22.484

22.486

22.488

22.490

22.492

22.494

22.496

22.498

22.500

22.502

22.504

22.506

22.508

22.510

22.512

22.514

22.516

22.518

22.520

22.522

22.524

22.526

22.528

22.530

22.532

22.534

22.536

22.538

22.540

22.542

22.544

22.546

22.548

22.550

22.552

22.554

22.556

22.558

22.560

22.562

22.564

22.566

22.568

22.570

22.572

22.574

22.576

22.578

22.580

22.582

22.584

22.586

22.588

22.590

22.592

22.594

22.596

22.598

22.600

22.602

22.604

22.606

22.608

22.610

22.612

22.614

22.616

22.618

22.620

22.622

22.624

22.626

22.628

22.630

22.632

22.634

22.636

22.638

22.640

22.642

22.644

22.646

22.648

22.650

22.652

22.654

22.656

22.658

22.660

22.662

22.664

22.666

22.668

22.670

22.672

22.674

22.676

22.678

22.680

22.682

22.684

22.686

22.688

22.690

22.692

22.694

22.696

22.698

22.700

22.702

22.704

22.706

22.708

22.710

22.712

22.714

22.716

22.718

22.720

22.722

22.724

22.726

22.728

22.730

22.732

22.734

22.736

22.738

22.740

22.742

22.744

22.746

22.748

22.750

22.752

22.754

22.756

22.758

22.760

## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : INDAL89 Report No : 804.040  
 Result File : /RESULT/P3082897\_012.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0548 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 1 Bottle no. : 1

% Dil-Fact  
100.00

Run Status : RunStatusOK  
 EndOffBaseline  
 SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.02	#12.01	0.000	26549	BB	.05523	Tetrachloro-m-xylene
	15.37	15.37	0.000	26695	BB	.05162	alpha-BHC
3	17.27	17.27	0.000	27021	BB	.05283	gamma-BHC (Lindane)
4	19.16	19.16	0.000	30700	BB	.05633	Heptachlor
5	24.58	24.58	0.000	22194	BB	.05430	Endosulfan I
6	25.70	25.70	0.000	42164	BB	.11151	Die�drin
7	26.92	26.92	0.000	31893	BB	.10727	Endrin
8	27.35	27.34	0.000	29684	FF	.10775	4,4'-DDD
9	27.80		0.000	8622	BB	0.00000	
10	28.40	28.40	0.000	30399	FF	.10615	4,4'-DDT
11	28.58	28.58	0.000	1821	FF	.00636	Endrin aldehyde
12	28.72		0.000	1247	FF	0.00000	
13	31.32	31.32	0.000	79922	BB	.56054	Methoxychlor
14	40.03	#40.03	0.000	48417	BB	.11159	Decachlorobiphenyl

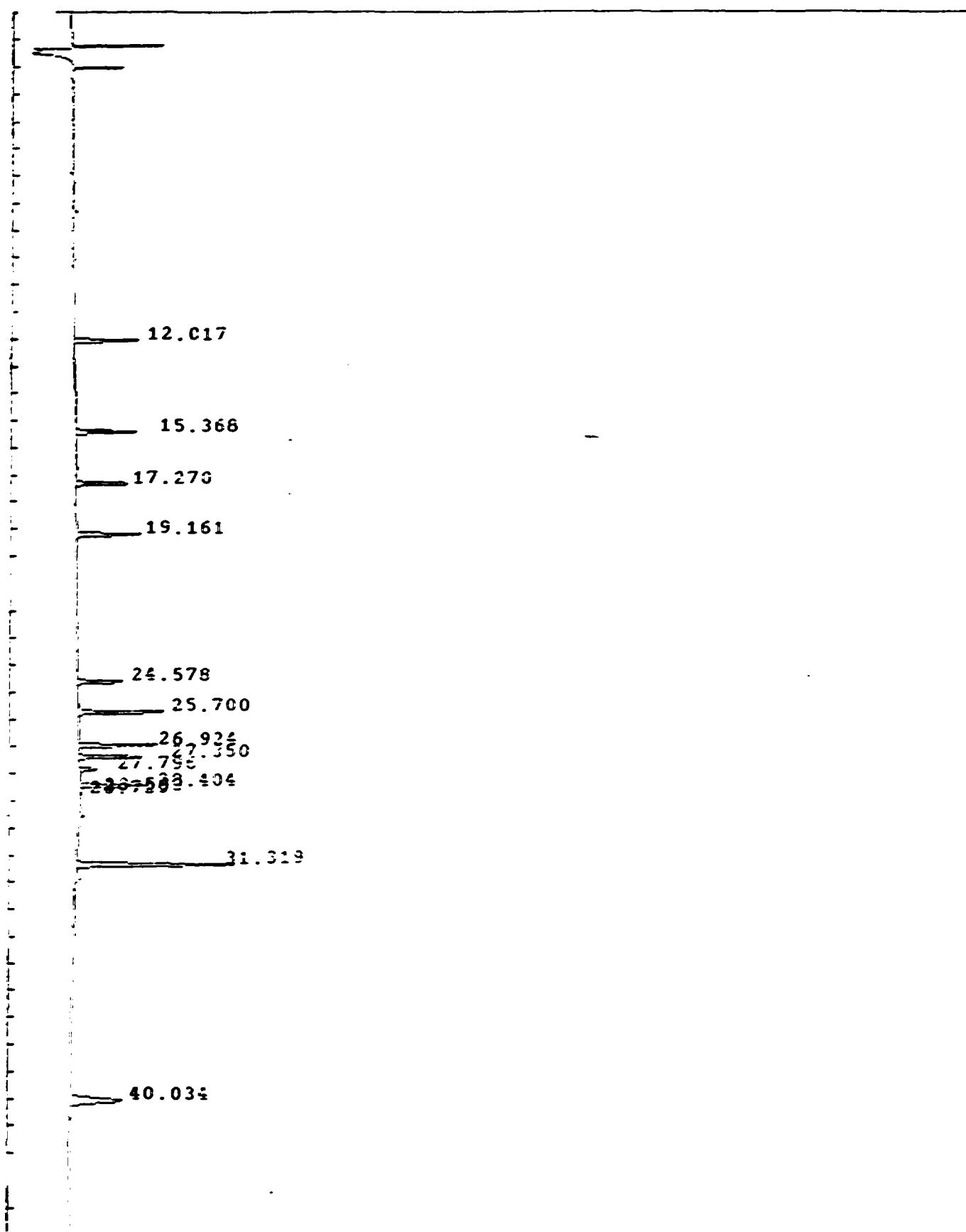
Total Area : 407330 Total PPB : 1.381

Report Time : 1135 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_012.RES

## IEA Pesticide Standard Report

**UserModifiedFile**

Sample Name : INDAL89 Inj on 0548 29Aug1997  
Result File : /RESULT/P3082897\_012.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul



## IEA Pesticide Standard Report

Sample Name : INDBL89 Report No : 805.020  
 Result File : /RESULT/P3082897\_013.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0643 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 2 Bottle no. : 2

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

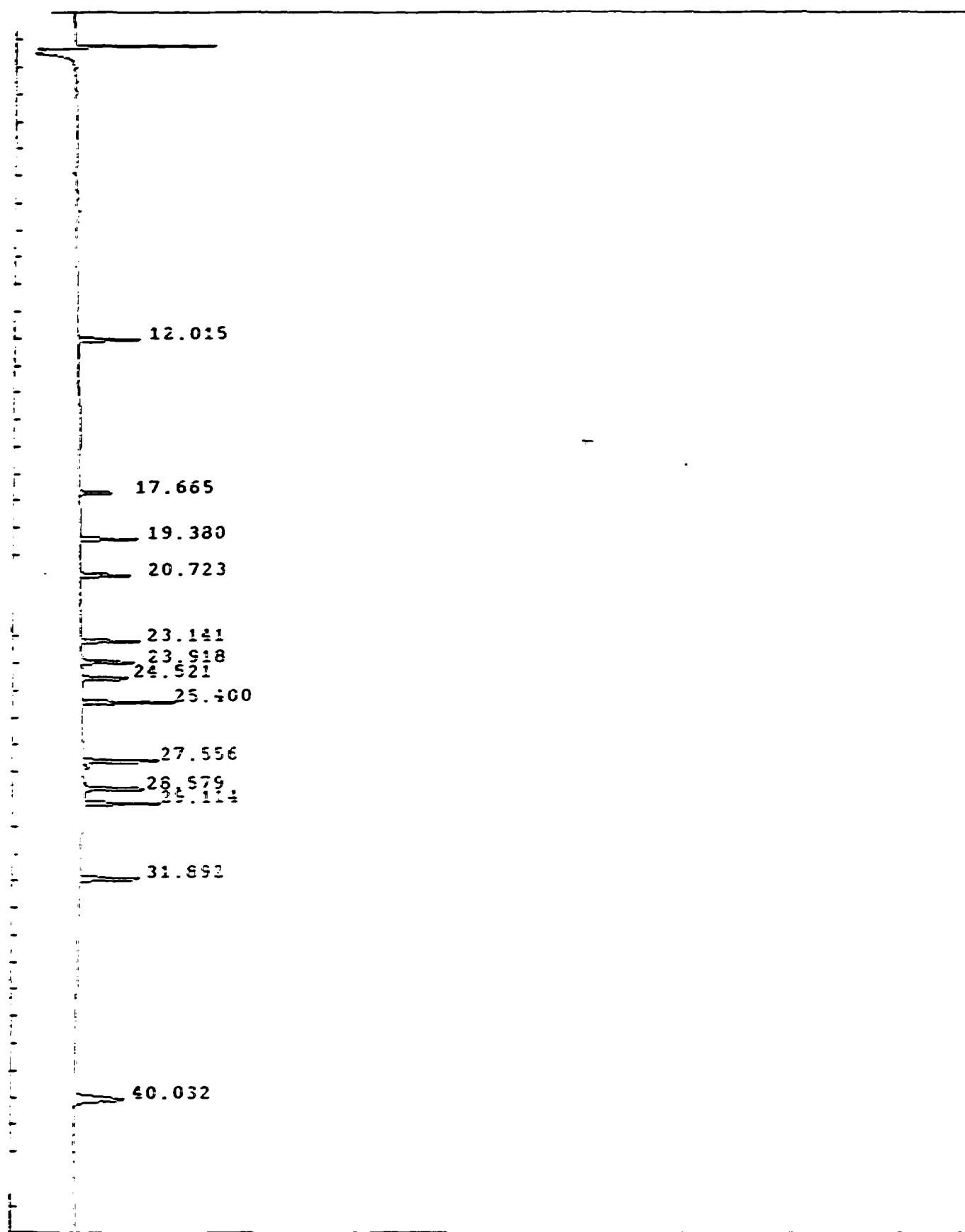
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.02	#12.01	.084	25592	BB	.05324	Tetrachloro-m-xylene
2	17.66	17.56	.087	16565	BB	.05375	beta-BHC
3	19.38	19.38	.089	24511	BB	.05185	delta-BHC
4	20.72	20.72	.105	24880	BB	.05622	Aldrin
5	23.14	23.14	.092	26512	BB	.05561	Heptachlor epoxide
6	23.92	23.92	.092	25782	BB	.05597	gamma-Chlordane
7	24.52	24.52	.089	23472	BB	.05490	alpha-Chlordane
8	25.40	25.40	.083	38044	BB	.10685	4,4'-DDE
9	27.56	27.55	.083	35913	BV	.10881	Endosulfan II
10	28.58	28.58	.080	29512	BV	.10303	Endrin aldehyde
11	29.11	29.11	.083	30873	BB	.10542	Endosulfan sulfate
12	31.89	31.89	.111	34322	BB	.10395	Endrin ketone
13	40.03	#40.03	.209	45733	BB	.10540	Decachlorobiphenyl

Total Area : 381710 Total PPB : 1.015

Report Time : 1141 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_013.RES

IEA Pesticide Standard Report

Sample Name : INDBL89 Inj on 0643 29Aug1997  
Result File : /RESULT/P3082897\_013.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1  $\mu$ l



## IEA Pesticide Standard Report

Sample Name : INDAM8Q Report No : 806.020  
 Result File : /RESULT/P3082897\_014.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0739 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 3 Bottle no. : 3

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

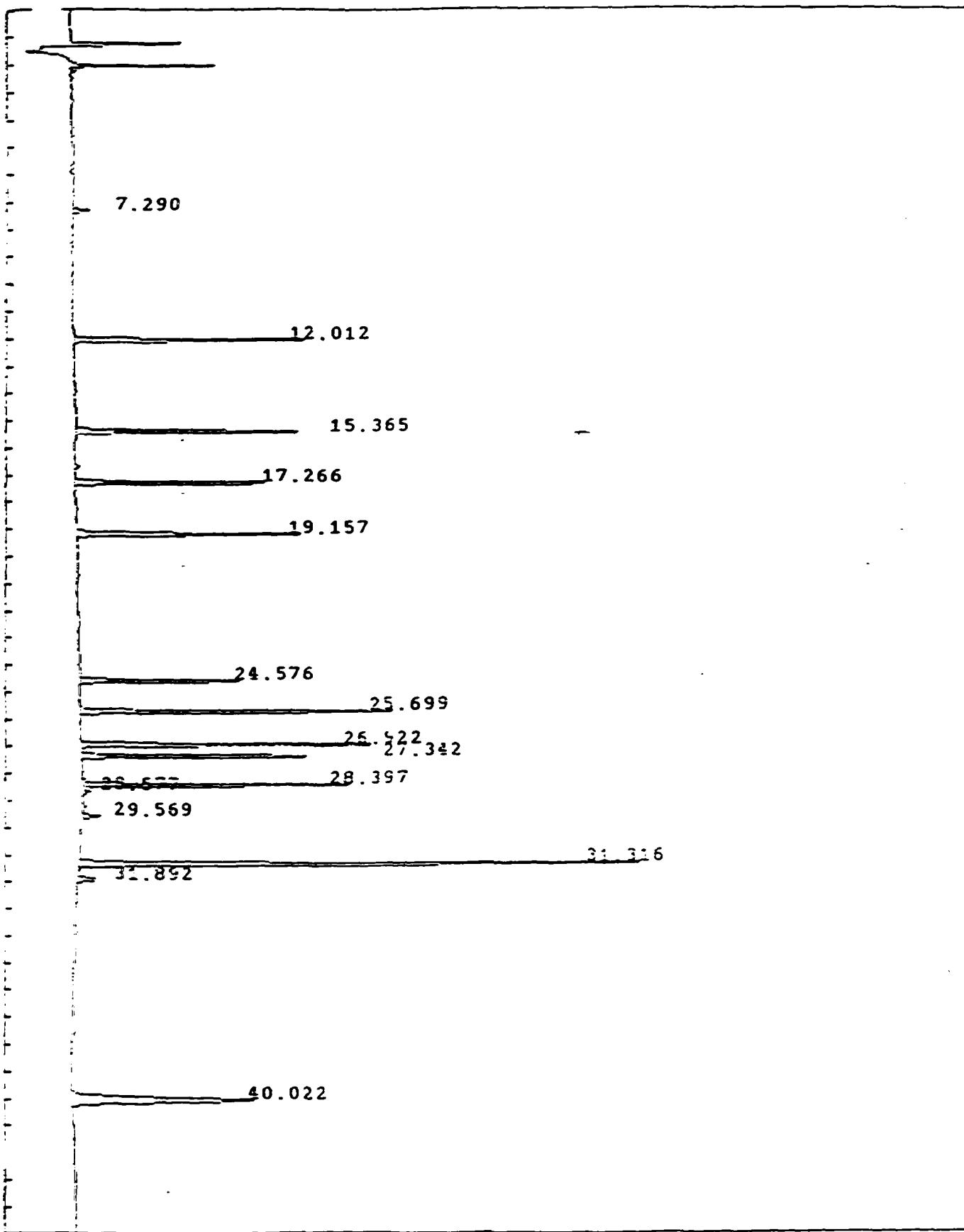
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.088	7076	BB	0.00000	
2	12.01	#12.01	.086	96146	BB	.20000	Tetrachloro-m-xylene
3	15.37	15.37	.087	103435	BB	.20000	alpha-BHC
4	17.27	17.27	.089	102290	BV	.20000	gamma-BHC (Lindane)
5	19.16	19.16	.105	108994	BB	.20000	Heptachlor
6	24.58	24.58	.090	81747	BB	.20000	Endosulfan I
7	25.70	25.70	.088	151244	BB	.40000	Dieldrin
8	26.92	26.92	.085	118930	BB	.40000	Endrin
9	27.34	27.34	.078	110196	BB	.40000	4,4'-DDD
10	28.40	28.40	.078	114555	BV	.40000	4,4'-DDT
11	28.58	28.58	.073	4143	VV	.01446	Endrin aldehyde
12	29.57		.086	7402	BB	0.00000	
13	31.32	31.32	.106	285162	BV	2.00000	Methoxychlor
14	31.89	31.89	.131	11738	BB	.03555	Endrin ketone
15	40.02	#40.03	.217	173559	BB	.40000	Decachlorobiphenyl

Total Area : 1476616 Total PPB : 5.050

Report Time : 1146 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_014.RES

IEA Pesticide Standard Report

Sample Name : INDAM8Q Inj on 0739 29Aug1997  
Result File : /RESULT/P3082897\_014.RES INSTRUMENT : HP5890P3  
C'-umn Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul



## IEA Pesticide Standard Report

Sample Name : INDBM8Q Report No : 807.020  
 Result File : /RESULT/P3082897\_015.RES  
 C umn Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 l..strument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0834 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 4 Bottle no. : 4

\* Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.087	7023	BE	0.00000	
	12.01	#12.01	.086	95249	BB	.19813	Tetrachloro-m-xylene
	17.66	17.66	.089	61635	BB	.20000	beta-BHC
4	19.38	19.38	.087	94540	VB	.20000	delta-BHC
5	20.72	20.72	.105	88502	BB	.20000	Aldrin
6	23.14	23.14	.094	95343	BB	.20000	Heptachlor epoxide
7	23.91	23.92	.092	92131	BB	.20000	gamma-Chlordane
8	24.52	24.52	.091	85508	BB	.20000	alpha-Chlordane
9	25.40	25.40	.081	142423	BV	.40000	4,4'-DDE
10	26.92	26.92	.087	4358	BB	.01466	Endrin
	27.34	27.34	.076	3604	BV	.01308	4,4'-DDD
-2	27.55	27.55	.084	132017	VV	.40000	Endosulfan II
13	27.79		.093	5370	VB	0.00000	
14	28.39	28.40	.075	5167	BV	.01804	4,4'-DDT
15	28.57	28.58	.084	114577	VB	.40000	Endrin aldehyde
16	29.11	29.11	.084	117142	BB	.40000	Endosulfan sulfate
17	31.31	31.32	.099	3338	BB	.02341	Methoxychlor
18	31.89	31.89	.111	132066	BB	.40000	Endrin ketone
1	40.02	#40.03	.215	167742	BB	.38659	Decachlorobiphenyl

Total Area : 1447735 Total PPB : 3.854

Report Time : 1151 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_015.RES

IEA Pesticide Standard Report

Sample Name : INDBM8Q

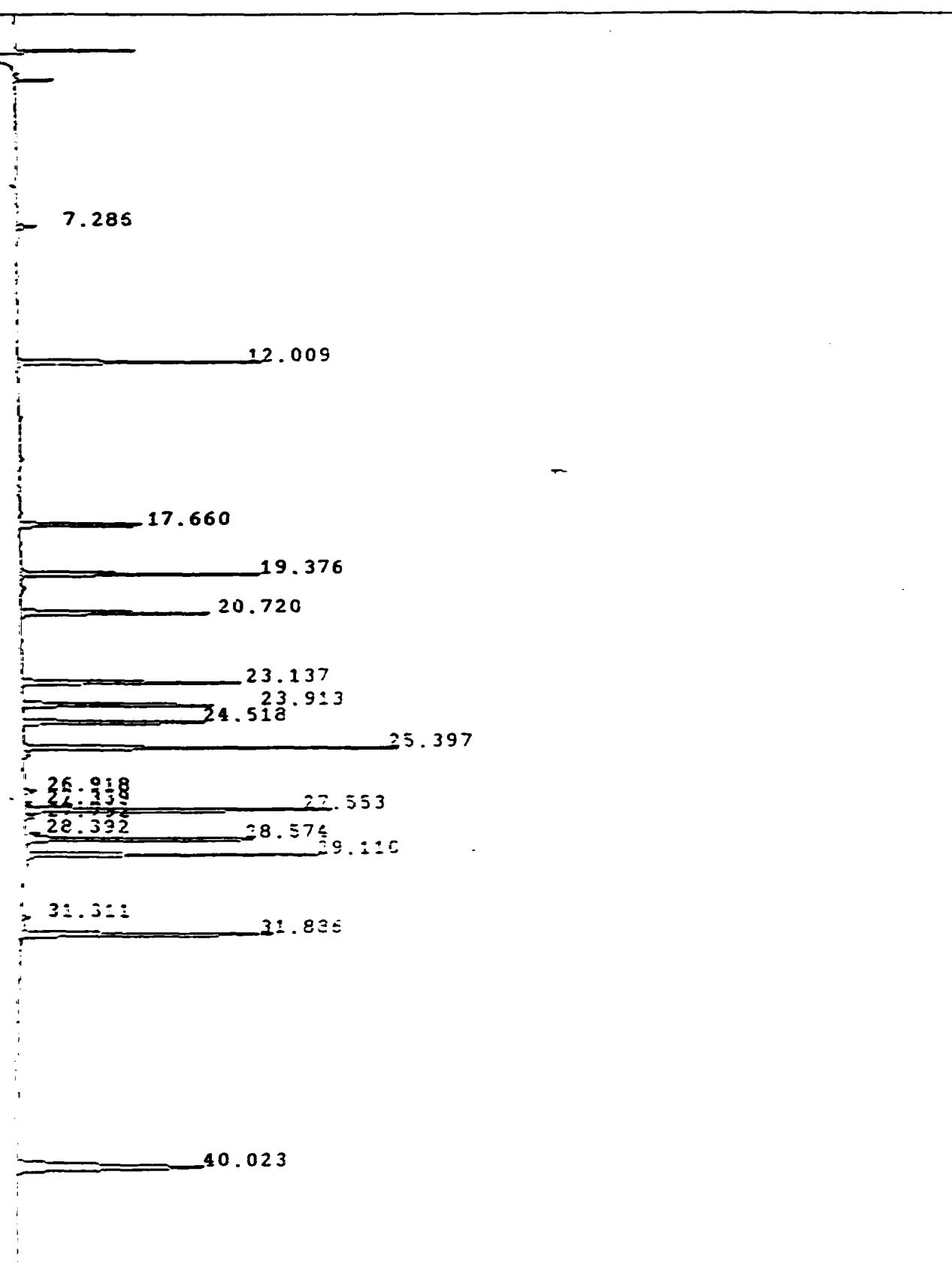
Inj on 0834 29Aug1997

Result File : /RESULT/P3082897\_015.RES

INSTRUMENT : HP5890P3

Column Type : RTX-35 30-Meter, 0.53mm ID

Inj. Vol. : 1  $\mu$ l



## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : INDAH89 Report No : 808.040  
 Result File : /RESULT/P3082897\_016.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0930 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 5 Bottle no. : 5

% Dil-Fact  
100.00

Run Status : RunStatusOK  
 EndOffBaseline  
 SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.74		0.000	3388	BB	0.00000	
	7.29		0.000	2991	BB	0.00000	
3	12.01	#12.01	0.000	489183	BB	1.01758	Tetrachloro-m-xylene
4	13.95		0.000	7148	BB	0.00000	
5	15.37	15.37	0.000	643533	BB	1.24433	alpha-BHC
6	16.69		0.000	13392	BB	0.00000	
7	17.27	17.27	0.000	603742	BV	1.18045	gamma-BHC (Lindane)
8	17.51		0.000	6507	VB	0.00000	
9	18.26		0.000	3421	BB	0.00000	
10	19.16	19.16	0.000	558455	BB	1.02475	Heptachlor
11	24.58	24.58	0.000	425744	BB	1.04162	Endosulfan I
12	25.40	25.40	0.000	4378	PV	.01229	4,4'-DDE
13	25.70	25.70	0.000	830741	VB	2.19708	Dieldrin
14	26.92	26.92	0.000	672652	BV	2.26234	Endrin
15	27.35	27.34	0.000	633476	FF	2.29946	4,4'-DDD
16	28.40	28.40	0.000	641849	FF	2.24119	4,4'-DDT
17	28.58	28.58	0.000	13005	FF	.04540	Endrin aldehyde
	29.57		0.000	39619	BV	0.00000	
19	31.32	31.32	0.000	1337031	BV	9.37733	Methoxychlor
20	31.57		0.000	5911	VV	0.00000	
21	31.90	31.89	0.000	47713	PB	.14451	Endrin ketone
22	33.85		0.000	6518	BV	0.00000	
23	37.53		0.000	6996	BB	0.00000	
24	40.03	#40.03	0.000	805203	BB	1.85574	Decachlorobiphenyl

Total Area : 7802594 Total PPB : 25.944

Report Time : 1155 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_016.RES

## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : INDAH89 Inj on 0930 29Aug1997  
Result File : /RESULT/P3082897\_016.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul

6.738  
7.292

12.013

13.946

15.366

16.693  
17.503  
18.259

17.267

19.156

25.398

24.575

25.699

26.923  
26.976  
29.570

26.923

28.400

31.316

33.846

37.530

40.028

## IEA Pesticide Standard Report

Sample Name : INDBH89 Report No : 809.020  
 Result File : /RESULT/P3082897\_017.RES  
 Curn Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.02 Mins. Injected on 1026 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 6 Bottle no. : 6

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.74		.067	2309	BB	0.00000	
	7.29		.089	2846	BB	0.00000	
	12.01	#12.01	.088	348684	BB	.72532	Tetrachloro-m-xylene
4	13.94		.084	4877	BB	0.00000	
5	17.66	17.66	.091	226649	BB	.73545	beta-BHC
6	19.38	19.38	.087	398478	BB	.84299	delta-BHC
7	20.72	20.72	.104	342064	BB	.77301	Aldrin
8	23.14	23.14	.094	348499	BB	.73104	Heptachlor epoxide
9	23.92	23.92	.093	342874	BB	.74432	gamma-Chlordane
10	24.52	24.52	.092	313861	BB	.73411	alpha-Chlordane
1	25.40	25.40	.082	574755	BB	1.61422	4,4'-DDE
12	27.55	27.55	.085	502288	BB	1.52189	Endosulfan II
13	28.58	28.58	.085	405371	BB	1.41519	Endrin aldehyde
14	29.11	29.11	.086	429501	BB	1.46660	Endosulfan sulfate
15	31.59		.114	5668	BV	0.00000	
16	31.89	31.89	.112	501549	VB	1.51909	Endrin ketone
17	40.02	#40.03	.226	576389	BB	1.32840	Decachlorobiphenyl

Total Area : 5326663 Total PPB : 14.152

Report Time : 1200 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_017.RES

IEA Pesticide Standard Report

Sample Name : INDBH89 Inj on 1026 29Aug1997  
Result File : /RESULT/P3082897\_017.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL

6.736  
7.287

12.011

13.945

12.661

19.378

20.722

23.139

23.915

24.519

25.399

27.555

28.575

31.594

31.688

40.023

## IEA Pesticide Standard Report

Sample Name : PEM1J Report No : 1.020  
 Result File : /RESULT/P3082897\_019.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 1411 29Aug1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 8 Bottle no. : 8

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

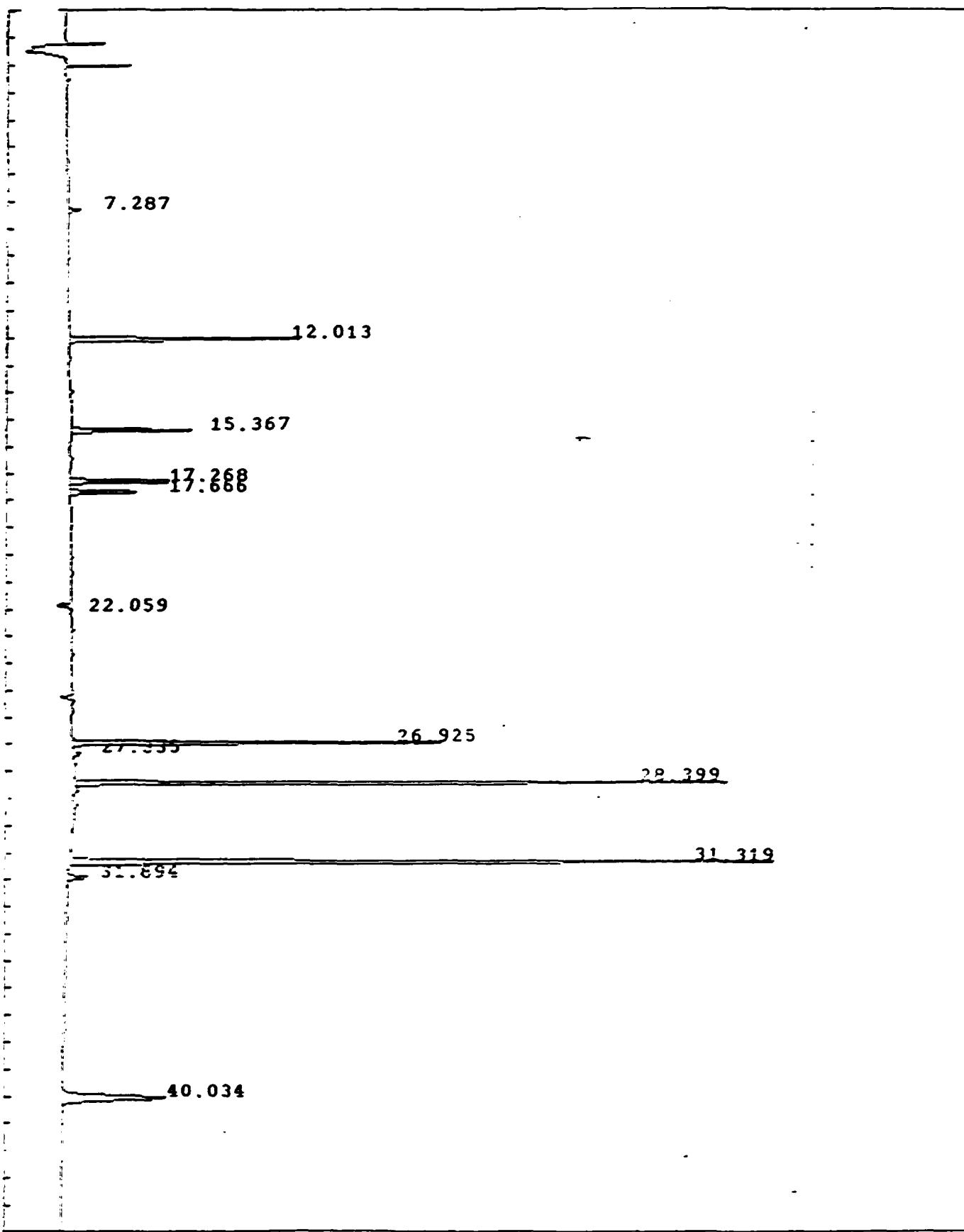
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.29		.090	5328	BB	0.00000	
	12.01	#12.01	.087	95838	BB	.19936	Tetrachloro-m-xylene
	15.37	15.37	.089	55388	BB	.10710	alpha-BHC
4	17.27	17.27	.091	54422	BB	.10641	gamma-BHC (Lindane)
5	17.67	17.66	.088	33593	BB	.10901	beta-BHC
6	22.06		.037	491	BB	0.00000	
7	26.92	26.92	.085	153429	BB	.51603	Endrin
8	27.34	27.34	.111	4969	BB	.01804	4,4'-DDD
9	28.40	28.40	.079	291037	BV	1.01623	4,4'-DDT
10	31.32	31.32	.108	364043	BB	2.55323	Methoxychlor
1	31.89	31.89	.125	12197	BB	.03694	Endrin ketone
12	40.03	#40.03	.217	97028	BB	.22362	Decachlorobiphenyl

Total Area : 1157764 Total PPB : 4.886

Report Time : 1208 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_019.RES

IEA Pesticide Standard Report

Sample Name : PEM1J Inj on 1411 29Aug1997  
Result File : /RESULT/P3082897\_019.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul



## IEA Pesticide Standard Report

Sample Name : PEM2D Report No : 2.000  
Result File : /RESULT/P3082897\_092.RES  
Column Type : RTX-35 30 Meter, 0.53mm ID Inj.-Vol. : 1-  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 46.00 Mins. Injected on 1440 08Sep1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 3/ 81 Bottle no. : 80

% Dil-Fact  
100.00

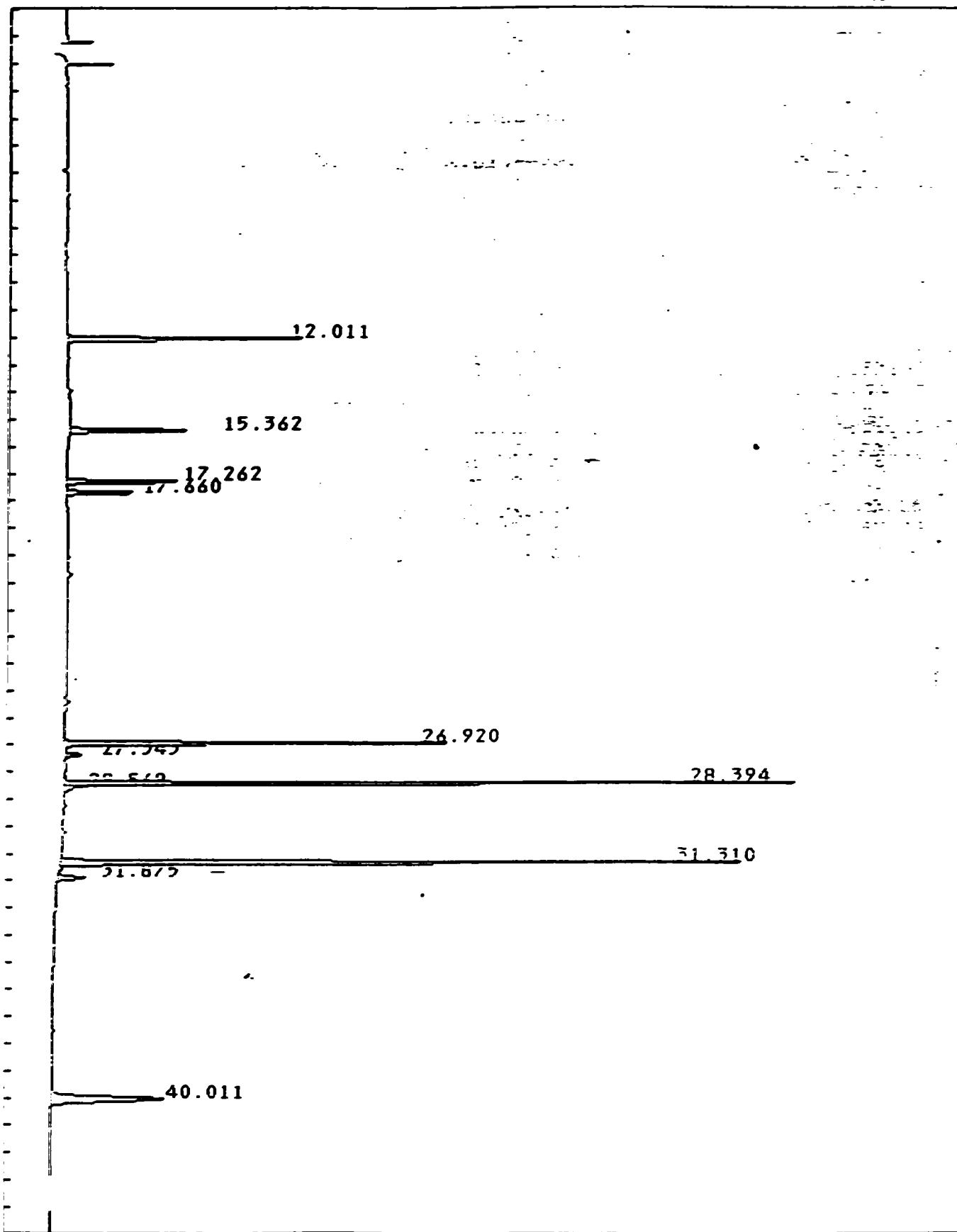
Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.01	#12.01	.087	97000	BB	.20178	Tetrachloro-m-xylene
2	15.36	15.36	.088	57100	BB	.11041	alpha-BHC
3	17.26	17.27	.090	55275	BB	.10807	gamma-BHC (Lindane)
4	17.66	17.66	.089	34799	BB	.11292	beta-BHC
5	26.92	26.92	.086	155909	BB	.52437	Endrin
6	27.34	27.34	.104	8373	BB	.03039	4,4'-DDD
7	28.39	28.40	.079	305806	BU	1.06780	4,4'-DDT
8	28.57	28.58	.135	7225	UB	.02522	Endrin aldehyde
9	31.31	31.32	.107	335209	BU	2.35101	Methoxychlor
10	31.88	31.89	.134	16174	PB	.04899	Endrin ketone
11	40.01	#40.03	.214	107097	BB	.24683	Decachlorobiphenyl

Total Area : 1179967 Total PPB : 4.828

Report Time : 1551 08Sep1997  
Method : /METHOD/P3082897CLP.MTH  
Result File : /RESULT/P3082897\_092.RES

Sample Name : PEM2D                          Inj on 1440 08Sep1997  
Result File : /RESULT/P3062897\_092.RES                  INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID                  Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : INDAMY Report No : 15.000  
 Result File : /RESULT/P3082897\_105.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 0241 09Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3 / 94 Bottle no. : 93

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak	Width	Area	Code	PPB	Name
1	7.29			.087	4843	BB	0.00000	
2	12.01	#12.01		.087	99484	BB	.20694	Tetrachloro-m-xylene
3	15.37	15.37		.088	108265	BB	.20934	alpha-BHC
	17.27	17.27		.090	105735	BV	.20674	gamma-BHC (Lindane)
5	19.16	19.16		.105	107811	BB	.19783	Heptachlor
6	24.58	24.58		.090	872226	BB	.21341	Endosulfan I
7	25.70	25.70		.087	161852	BB	.42805	Dieldrin
8	26.92	26.92		.085	128971	BB	.43377	Endrin
9	27.35	27.34		.080	123666	BB	.44890	4,4'-DDD
10	28.40	28.40		.079	125309	BV	.43755	4,4'-DDT
11	28.58	28.58		.073	5382	UV	.01879	Endrin aldehyde
12	29.57			.096	9618	BB	0.00000	
3	31.32	31.32		.107	299271	BV	2.09895	Methoxychlor
14	31.89	31.89		.135	15024	BB	.04550	Endrin ketone
15	40.03	#40.03		.218	200455	BB	.46199	Decachlorobiphenyl

Total Area : 1582912 Total PPB : 5.408

Report Time : 0331 09Sep1997  
 Method : /METHOD/P3082897CLP.MTH  
 Result File : /RESULT/P3082897\_105.RES

Sample Name : INDAMAY Inj on 0241 09Sep1997  
Result File : /RESULT/P30826??\_105.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter,0.53mm ID Inj. Vol. : 1 uL

7.292

12.014

15.367

17.268

19.159

24.578

25.700

26.924  
27.345

28.577 28.579

29.570

31.516

32.074

40.026

## IEA Pesticide Standard Report

Sample Name : INDBM8Y Report No : 16.000  
Result File : /RESULT/P3082897\_106.RES  
Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 46.00 Mins. Injected on 0336 09Sep1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 3/ 95 Bottle no. : 94

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.01	#12.01	.087	94250	BB	.19606	Tetrachloro-m-xylene
2	17.67	17.66	.089	61351	BB	.19908	beta-BHC
3	19.38	19.38	.088	94317	BB	.19953	delta-BHC
4	20.73	20.72	.104	89163	BB	.20149	Aldrin
5	23.14	23.14	.093	96395	BB	.20221	Heptachlor epoxide
6	23.92	23.92	.092	95436	BB	.20718	gamma-Chlordane
7	24.52	24.52	.091	88402	BB	.20677	alpha-Chlordane
8	25.40	25.40	.083	149740	BB	.42055	4,4'-DDE
9	27.56	27.55	.085	144322	BB	.43728	Endosulfan II
10	28.58	28.58	.085	124247	BB	.43376	Endrin aldehyde
11	29.11	29.11	.085	127692	BB	.43602	Endosulfan sulfate
12	31.89	31.89	.111	144711	VB	.43830	Endrin ketone
13	40.03	#40.03	.217	187210	BB	.43146	Decachlorobiphenyl

Total Area : 1497237 Total PPB : 4.010

Report Time : 0426 09Sep1997  
Method : /METHOD/P3082897CLP.MTH  
Result File : /RESULT/P3082897\_106.RES

Sample Name : INDBMBY Inj on 0336 09Sep1997  
Result File : /RESULT/P3082897\_106.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL

12.014

17.665

19.382

20.725

23.142

23.919

24.522

25.402

27.556

28.579

29.115

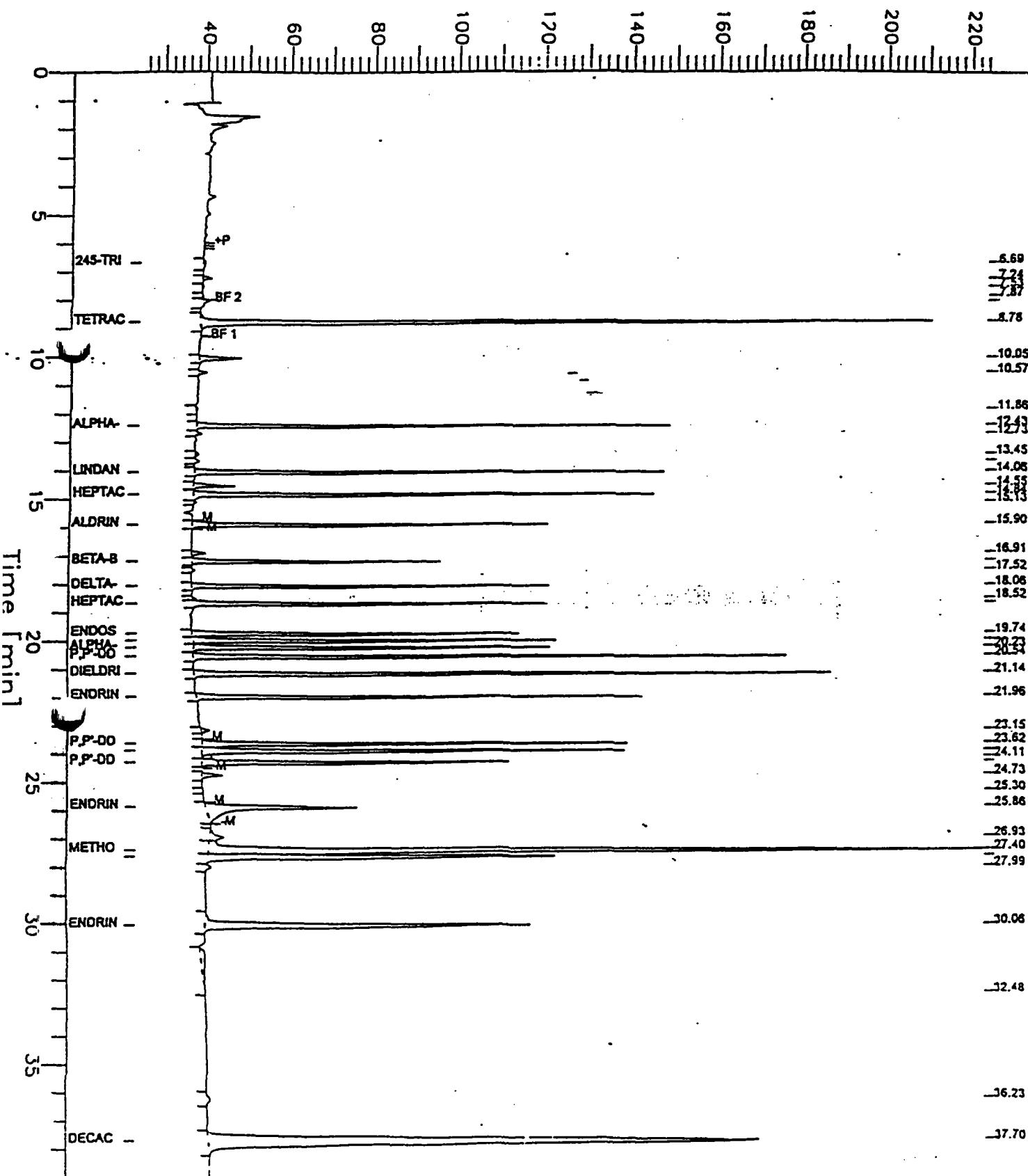
31.891

40.027

Sample Name : Lot 172 Florisil Recovery  
File Name : L:\TC4\HPS890\172\_005.raw  
Method : FLOROC  
Start Time : 0.00 min End Time : 39.00 min  
Scale Factor: -1.0 Plot Offset: 24 mV

Sample #: 1 Page 1 of 1  
Date : 1/17/96 04:43 PM  
Time of Injection: 1/16/96 08:54 PM  
Low Point : 24.19 mV High Point : 224.19 mV  
Plot Scale: 200.0 mV

### Response [mV]



Software Version: 4.1<0G07>

Sample Name : Lot 172 Florisil Recovery

Time : 1/17/96 04:43 PM

Sample Number: 1

Study : Lot 172 Florisil QC

Operator : nmb

Instrument : HP5890\_NEW

Channel : A A/D mV Range : 2000

At Sampler :

Rack/Vial : 0/0

Interface Serial # : 2136574899 Data Acquisition Time: 1/16/96 08:54 PM

Delay Time : 0.00 min.

End Time : 39.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : L:\TC4\HP5890\172\_005.RAW

Result File : L:\TC4\HP5890\172\_005.rst

Inst Method : FLORQC from L:\TC4\HP5890\172\_005.rst

Proc Method : L:\TC4\HP5890\FLORQC.mth

Calib Method : L:\TC4\HP5890\FLORQC.mth

Sequence File : L:\TC4\HP5890\172FLOR.SEQ

Sample Volume : 1.0000  $\mu$ L Area Reject : 1000.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

### Inert SPE Florisil QC

Peak #	Time [min]	Component Name	Area [uV*sec]	Amount Recovered [ng/mL]
1	6.688	245-trichlorophenol	6507	1655.30
2	7.242		11580	2945.82
3	7.534		1974	502.10
4	7.869		2010	0.10
5	8.053		15552	0.78
6	8.781	tetrachloro-m-xylene	919310	46.18
7	10.054		59200	2.97
8	10.574		9661	0.49
9	11.863		4428	0.22
10	12.432	alpha-BHC	474897	23.20
11	12.732		5799	0.28
12	13.452		5508	0.27
13	13.699		5778	0.28
14	14.059	lindane	478279	23.42
15	14.550		49028	2.15
16	14.843	heptachlor	527430	23.16
17	15.131		3323	0.15

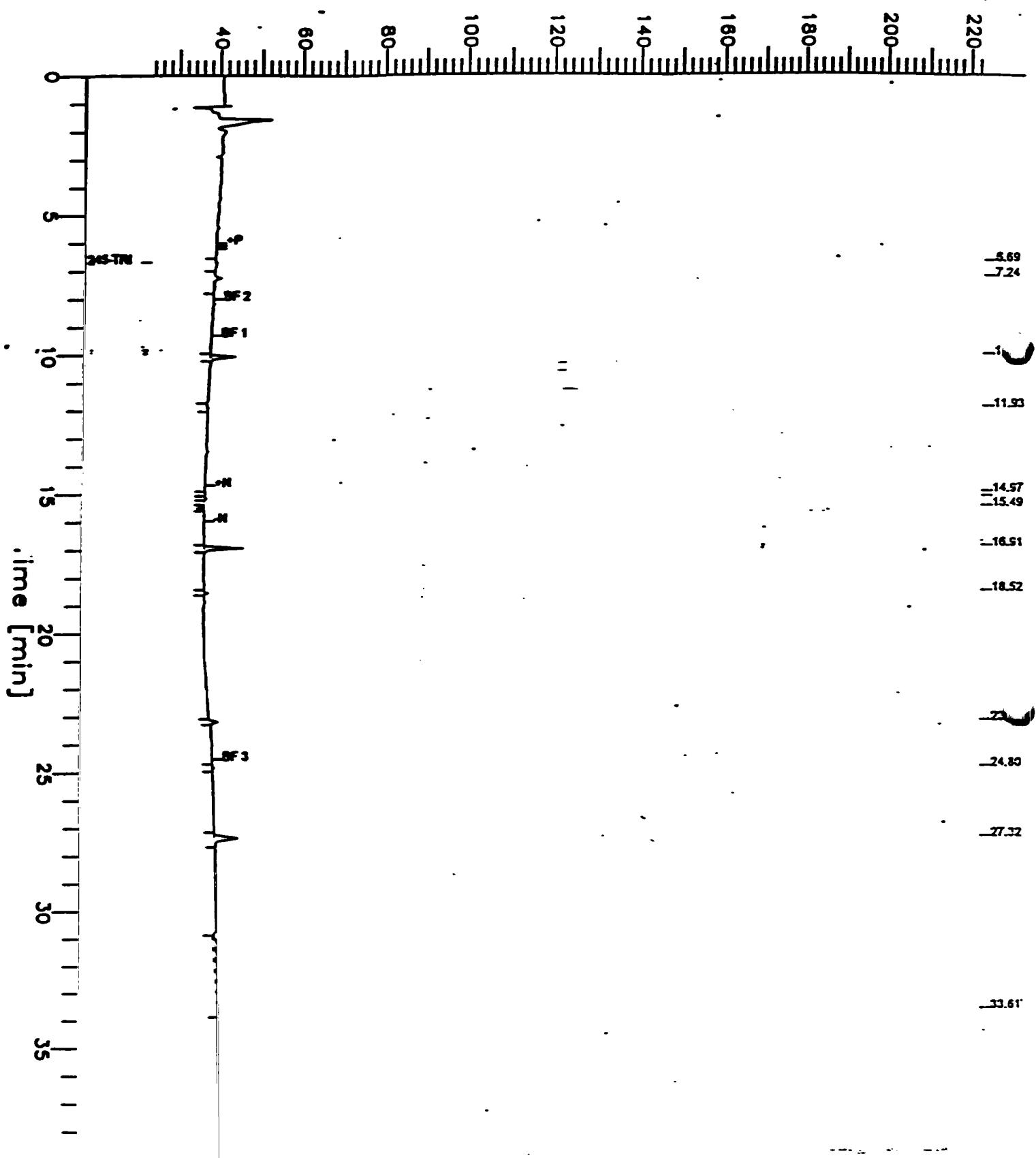
Peak #	Time [min]	Component Name	Area [uV*sec]	Amount Recovered [ng/mL]
18	15.898	aldrin	398535	23.08
19	16.913		17972	1.55
20	17.193	beta-BHC	265029	22.87
	17.516		3917	0.34
22	18.059	delta-BHC	357100	23.71
23	18.516		3642	0.21
24	18.681	heptachlor epoxide	417367	23.53
25	19.740	endosulfan I	381703	23.85
26	19.981	gamma-chlordane	418209	23.62
27	20.225	alpha-chlordane	412550	23.71
28	20.541	p,p'-DDE	646037	47.98
29	21.142	dieldrin	721671	48.08
30	21.964	endrin	510080	47.80
31	23.154		11527	1.13
32	23.621	p,p'-DDD	502068	49.38
33	23.882	endosulfan II	545780	48.53
34	24.110		18285	2.29
35	24.284	p,p'-DDT	390416	48.86
36	24.731		29795	3.73
37	25.301		1176	0.12
38	25.862	endrin aldehyde	329932	33.06
39	26.926		36488	6.79
40	27.396	methoxychlor	1388021	258.15
41	27.618	endosulfan sulfate	592286	47.63
42	27.987		8877	0.71
43	30.059	endrin ketone	650830	48.70
44	32.479		57064	4.27
45	36.231		11434	0.63
46	37.703	decachlorobiphenyl	1848508	101.84

6193.00

Sample Name : Method Blank  
File Name : L:\TC4\MP5820\172\_004.raw  
Method : FLOQC  
Start Time : 0.00 min End Time : 39.00 min  
Scale Factor: -1.0 Ploc Offset: 23 mV

Sample #: Page 1 of 1  
Date : 1/17/96 04:43 PM  
Time of Injections: 1/16/96 08:18 PM  
Low Point : 23.30 mV High Point : 223.30 mV  
Elec Scale: 200.0 mV

### Response [mV]



Sample Name : Method Blank  
Sample Number:  
Operator : mmb

Time : 1/17/96 04:43 PM  
Study : Lot 172 Florisil QC

Instrument : HP5890\_NEW Channel : A A/D mV Range : 2000  
Au Sampler :  
Ra /Vial : 0/0

Interface Serial # : 2136574899 Data Acquisition Time: 1/16/96 08:10 PM  
Delay Time : 0.00 min.  
End Time : 39.00 min.  
Sampling Rate : 2.0000 pts/sec

Raw Data File : L:\TC4\HP5890\172\_004.RAW  
Result File : L:\TC4\HP5890\172\_004.rst  
Inst Method : FLORQC from L:\TC4\HP5890\172\_004.rst  
Proc Method : L:\TC4\HP5890\FLORQC.mth  
Calib Method : L:\TC4\HP5890\FLORQC.mth  
Sequence File : L:\TC4\HP5890\172FLOR.SEQ

Sample Volume : 1.0000  $\mu$ L Area Reject : 1000.000000  
Sample Amount : 1.0000 Dilution Factor : 1.00

### Inert SPE Florisil QC

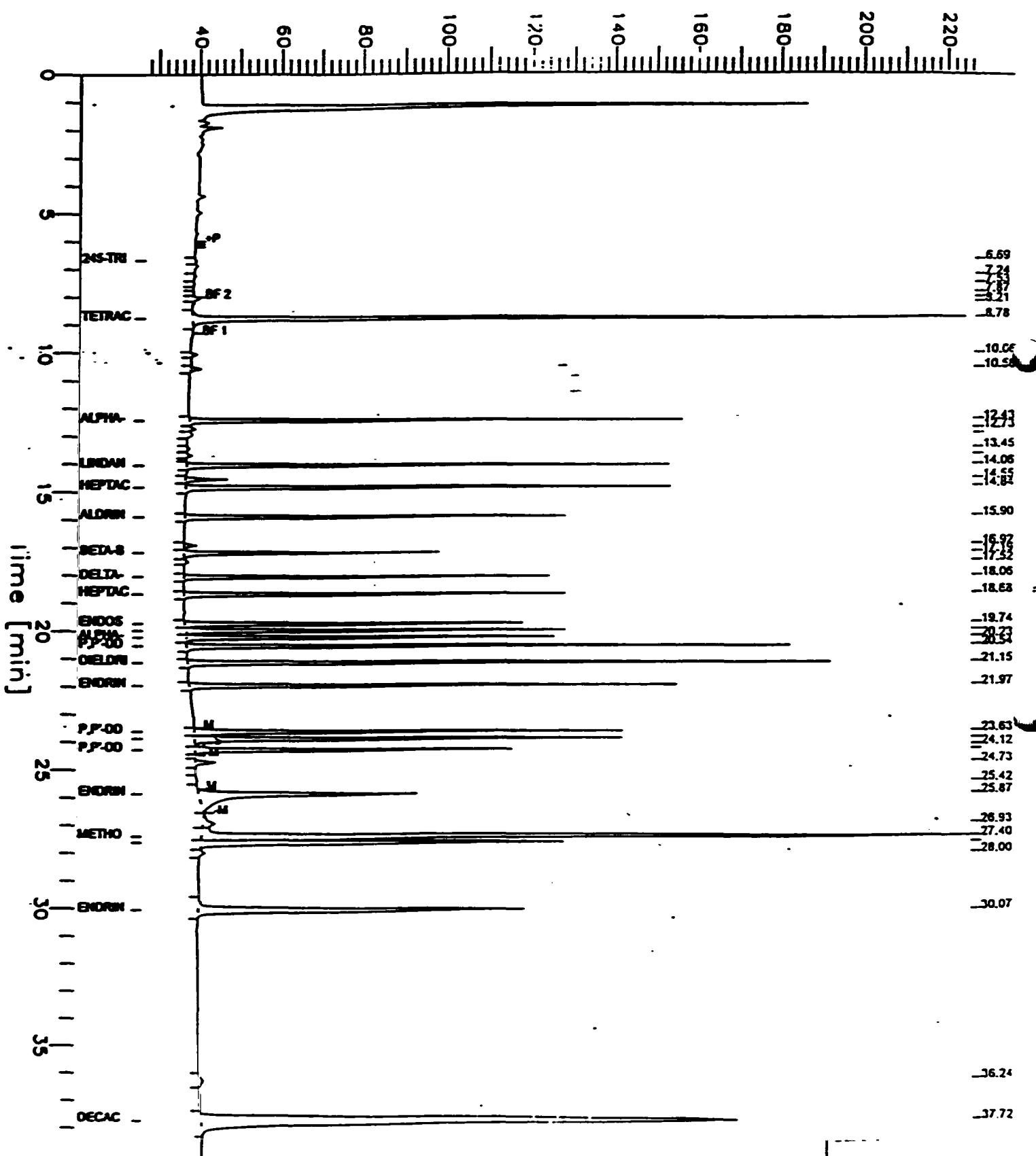
Peak #	Time [min]	Component Name	Area [uV*sec]	Amount Recovered [ng/mL]
1	6.694	245-trichlorophenol	5388	1370.70
2	7.243		10333	2628.54
3	10.056		33876	1.70
4	11.933		3576	0.17
5	14.974		1498	0.07
6	15.135		2079	0.09
7	15.489		9177	0.53
8	16.914		49178	4.24
9	18.517		4140	0.23
10	23.157		10307	1.01
11	24.802		2698	0.34
12	27.323		42149	7.84
13	33.606		72145	5.40

4020.87

Sample Name : masking Std  
File Name : L:\TC\WPS90\172\_002.raw  
Method : PLMOC  
Start Time : 0.00 min End Time : 39.00 min  
Scale Factor: -1.0 Plot Offset: 27 mV

Sample #: 1 Page 1 of 1  
Date : 1/17/96 04:43 PM  
Time of Injection: 1/16/96 06:41 PM  
Low Point : 26.78 mV High Point : 226.78 mV  
Plot Scale: 200.0 mV

### Response [mV]



Sample Name : Working Std  
Sample Number: 1  
Operator : mmb

Time : 1/17/96 04:43 PM  
Study : Lot 172 Florisil QC

Instrument : HP5890\_NEW Channel : A A/D mV Range : 2000  
Air Sampler :  
Rd /Vial : 0/0

Interface Serial # : 2136574899 Data Acquisition Time: 1/16/96 06:41 PM  
Delay Time : 0.00 min.  
End Time : 39.00 min.  
Sampling Rate : 2.0000 pts/sec

Raw Data File : L:\TC4\HP5890\172\_002.RAW  
Result File : L:\TC4\HP5890\172\_002.rst  
Inst Method : FLORQC from L:\TC4\HP5890\172\_002.rst  
Proc Method : L:\TC4\HP5890\FLORQC.mth  
Calib Method : L:\TC4\HP5890\FLORQC.mth  
Sequence File : L:\TC4\HP5890\172FLOR.SEQ

Sample Volume : 1.0000  $\mu$ L Area Reject : 1000.000000  
Sample Amount : 1.0000 Dilution Factor : 1.00

### Inert SPE Florisil QC

Peak #	Time [min]	Component Name	Area [uV*sec]	Amount Recovered [ng/mL]
1	6.689	245-trichlorophenol	3137.	798.02
2	7.241		3374	858.31
3	7.531		1859	472.91
4	7.867		1796	0.09
5	8.053		11033	0.55
6	8.214		3021	0.15
7	8.781	tetrachloro-m-xylene	975606	49.01
8	10.058		8143	0.41
9	10.576		14864	0.75
10	12.432	alpha-BHC	504268	24.63
11	12.733		6857	0.33
12	12.939		8178	0.40
13	13.451		3409	0.17
14	13.701		6054	0.30
15	14.061	lindane	506351	24.79
1	14.551		51762	2.27
1	14.844	heptachlor	564763	24.80

Peak #	Time [min]	Component Name	Area [uV*sec]	Amount Recovered [ng]
18	15.899	aldrin	430570	24.94
19	16.915		16692	1.44
20	17.194	beta-BHC	288884	24.92
	17.517		5284	0.46
22	18.061	delta-BHC	375454	24.93
23	18.683	heptachlor epoxide	442617	24.96
24	19.743	endosulfan I	400786	25.04
25	19.984	gamma-chlordane	442840	25.01
26	20.228	alpha-chlordane	435613	25.03
27	20.544	p,p'-DDE	679682	50.48
28	21.146	dieldrin	754427	50.26
29	21.967	endrin	570209	53.43
30	23.625	p,p'-DDD	515752	50.73
31	23.886	endosulfan II	567500	50.46
32	24.115		16927	2.12
33	24.288	p,p'-DDT	409542	51.25
34	24.734		28509	3.57
35	25.419		3486	0.35
36	25.866	endrin aldehyde	491588	49.26
37	26.931		38123	7.09
38	27.401	methoxychlor	1387360	258.03
39	27.625	endosulfan sulfate	628641	50.55
40	27.995		9123	0.73
41	30.065	endrin ketone	670494	50.18
42	36.239		11304	0.62
43	37.716	decachlorobiphenyl	1866051	102.80

3266.52

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL &amp; ENVIRONMENTAL Contract: SOW 10/92

PBLK01

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PBLK01

Date Received: / /

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IKA Pesticide Standard Report

Sample Name : PBLK01 Report No : 99.00  
 Result File : /RESULT/P2091297\_025.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 2200 19Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 13 Bottle no. : 13

x Dil-Fact  
~~+100.00~~ 20.00  
~~100.00~~  
 20.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.14		.046	3396	PU	0.00000	
2	3.29		.052	1388	UU	0.00000	
3	3.42		.073	4307	UU	0.00000	
4	3.62		.097	2299	PU	0.00000	
5	3.81		.081	5941	UU	0.00000	
6	4.49		.098	4219	BU	0.00000	
7	5.21		.064	1722	BB	0.00000	
8	6.10		.105	1599	BU	0.00000	
9	6.26		.062	1108	UU	0.00000	
10	6.43		.063	6625	PU	0.00000	
11	7.73	7.73	.066	87536	UU	.0299	Tetrachloro-m-xylene
12	8.92		.102	2934	BB	0.00000	
13	9.28		.106	2657	BB	0.00000	
14	10.62		.079	1263	BB	0.00000	
15	12.10		.099	5588	BB	0.00000	
16	13.90		.108	2067	BB	0.00000	
17	16.97		.157	15088	BB	0.00000	
18	31.82		.166	10886	BB	0.00000	
19	34.42	34.43	.096	983	BU	.00242	Methoxychlor
20	34.63		.138	2666	UB	0.00000	
21	36.43		.224	8560	BU	0.00000	
22	39.29		1.479	29384	UU	0.00000	
23	39.97	#39.99	.141	131356	UB	.02590	Decachlorobiphenyl

Total Area : 333571 Total PPB : .237

Report Time : 2245 19Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_025.RES

9/20/97  
11

IEA Pesticide Standard Report

Sample Name : PBLK01 Inj on 2200 19Sep1997  
Result File : /RESULT/P2091297\_025.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL

3.7863  
3.8805  
4.495  
5.213  
6.225

7.726

8.912

10.622

12.095

13.901

16.974

31.823

3444626

36.433

39.288

39.973

## IEA Pesticide Standard Report

Sample Name : PBLK01 Report No : 3.010  
 Result File : /RESULT/P3082897\_093.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 1535 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 82 Bottle no. : 81

\* Dil-Fact

~~100.00~~ ~~20.00~~  
~~500.00~~

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.35		.081	3456	BB	0.00000	
2	7.29		.101	4563	BB	0.00000	
3	12.01	#12.01	.091	85108	BB . <del>03541</del>	<del>0.00000</del>	Tetrachloro-m-xylen
4	15.64		.103	4112	BB	0.00000	
5	18.86		.101	5693	BB	0.00000	
6	20.68	20.72	.104	7831	BB	..01770	<del>Aldrin</del> NC/BQ
7	28.71		.122	8725	BB	0.00000	
8	40.02	#40.03	.224	85664	BB . <del>03949</del>	<del>0.00000</del>	Decachlorobiphenyl

Total Area : 205150 Total PPB : .392

Report Time : 2046 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_093.RES

9/20/97

IEA Pesticide Standard Report

Sample Name : PBLK01 Inj on 1535 08Sep1997  
Result File : /RESULT/P3082897\_093.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul

6.347  
7.294

12.014

15.640

18.863

20.685

28.715

40.019

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK2B

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK2B

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 09/13/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : PIBLK2B Report No : 89.01  
Result File : /RESULT/P2091297\_019.RES  
Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P2  
Calculation : ExternalSTD  
Run Time : 44.00 Mins. Injected on 1236 13Sep1997  
Sequence File : /SEQUENCE/P2091297CLP.SEQ  
Subseq/Sample : 3/ 7 Bottle no. : 7

% Dil-Fact  
100.00

Run Status : RunStatusOK

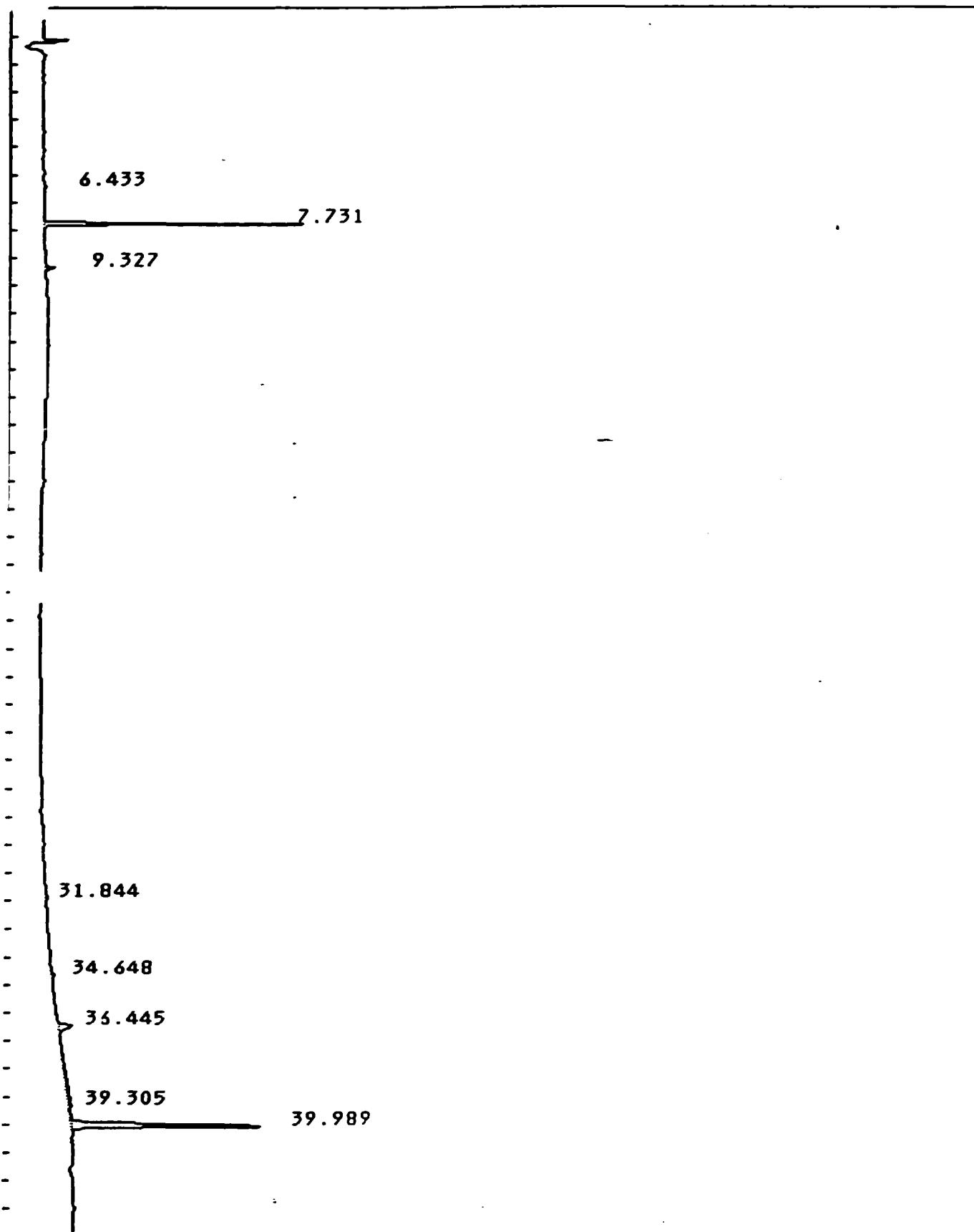
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.065	1552	BB	0.00000	
2	7.73	7.73	.064	120840	BB	.14490	Tetrachloro-m-xylene
3	9.33		.080	5582	BB	0.00000	
4	31.84		.125	1834	BB	0.00000	
5	34.65		.137	2535	BB	0.00000	
6	36.45		.187	17193	BB	0.00000	
7	39.31		1.229	23118	PV	0.00000	
8	39.99	#39.99	.132	173539	VB	.17107	Decachlorobiphenyl

Total Area : 346193 Total PPB : .316

Start Time : 1632 19Sep1997  
Method : /METHOD/P2091297CLP.MTH  
Result File : /RESULT/P2091297\_019.RES

IEA Pesticide Standard Report

Sample Name : PIBLK2B Inj on 1236 13Sep1997  
Result File : /RESULT/P2091297\_019.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3B

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK3B

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 09/19/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

IEA Pesticide Standard Report

Sample Name : PIBLK3B Report No : 97.00  
Result File : /RESULT/P2091297\_023.RES  
Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P2  
Calculation : ExternalSTD  
Run Time : 44.00 Mins. Injected on 2012 19Sep1997  
Sequence File : /SEQUENCE/P2091297CLP.SEQ  
Subseq/Sample : 3/ 11 Bottle no. : 11

# Dil-Fact  
100.00

Run Status : RunStatusOK

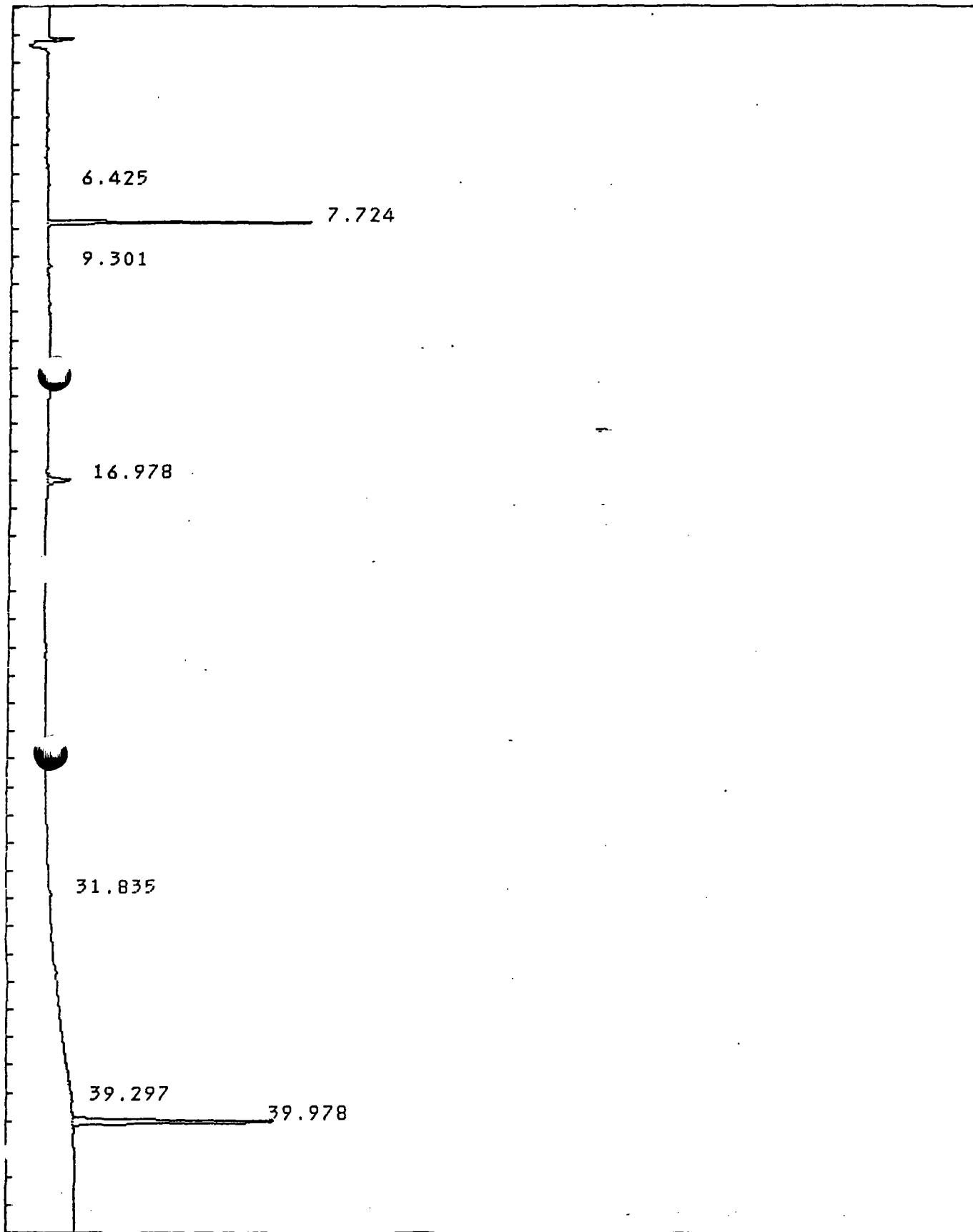
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.063	1232	BB	0.00000	
2	7.72	7.73	.063	123128	BB	.14764	Tetrachloro-m-xylene
3	9.30		.070	1432	BB	0.00000	
4	16.98		.150	22004	BB	0.00000	
5	31.84		.136	2211	BB	0.00000	
6	39.30		.843	7670	BB	-	0.00000
7	39.98	#39.99	.130	172321	BB	.16987	Decachlorobiphenyl

Total Area : 329998 Total PPB : .318

Report Time : 2057 19Sep1997  
Method : /METHOD/P2091297CLP.MTH  
Result File : /RESULT/P2091297\_023.RES

IEA Pesticide Standard Report

Sample Name : PIBLK3B Inj on 2012 19Sep1997  
Result File : /RESULT/P2091297\_023.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK3C

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK3C

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 09/20/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

IEA Pesticide Standard Report

Sample Name : PIBLK3C Report No :109.00  
Result File : /RESULT/P2091297\_035.RES  
Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P2  
Calculation : ExternalSTD  
Run Time : 44.00 Mins. Injected on 0659 20Sep1997  
Sequence File : /SEQUENCE/P2091297CLP.SEQ  
Subseq/Sample : 3/ 23 Bottle no. : 23

% Dil-Fact  
100.00

Run Status : RunStatusOK

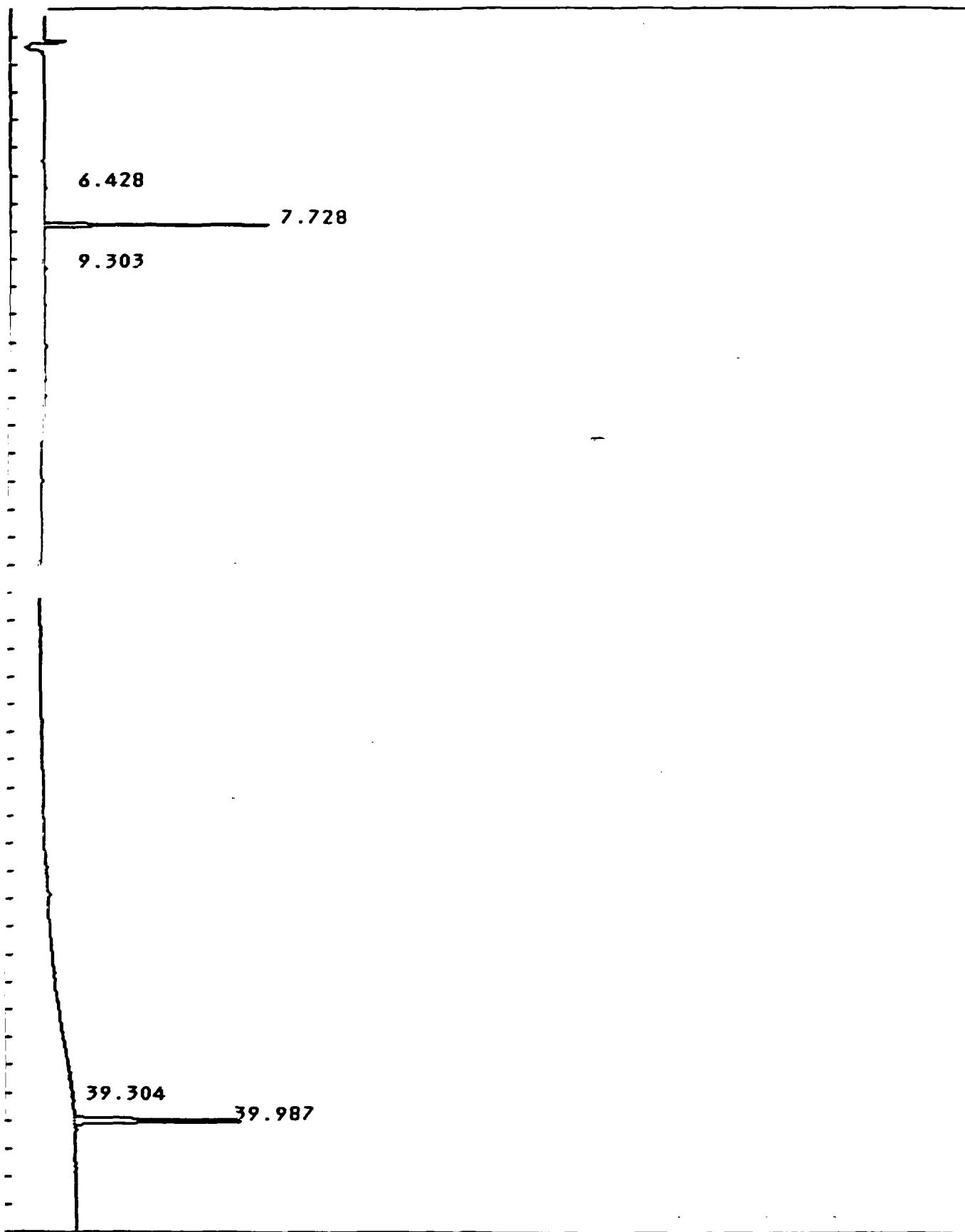
Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.43		.064	1251	BB	0.00000	
2	7.73	7.73	.064	104972	BB	.12587	Tetrachloro-m-xylene
	9.30		.070	1210	BB	0.00000	
	39.30		1.204	10652	BB	0.00000	
5	39.99	#39.99	.129	152580	BB	.15041	Decachlorobiphenyl

Total Area : 270664 Total PPB : .276

Report Time : 0744 20Sep1997  
Method : /METHOD/P2091297CLP.MTH  
Result File : /RESULT/P2091297\_035.RES

IEA Pesticide Standard Report

Sample Name : PIBLK3C Inj on 0659 20Sep1997  
Result File : /RESULT/P2091297\_035.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1  $\mu$ l



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK9N

Lab Name: INDUSTRIAL &amp; ENVIRONMENTA Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK9N

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 08/29/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4, 4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4, 4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4, 4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

**IEA Pesticide Standard Report**

Sample Name : PIBLK9N Report No : 810.020  
Result File : /RESULT/P3082897\_018.RES Inj. Vol. : 1 ul  
Column Type : RTX-35 30 Meter, 0.53mm ID  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 46.00 Mins. Injected on 1121 29Aug1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 3/ 7 Bottle no. : 7

% Dil-Fact  
100.00

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak	Width	Area	Code	PPB	Name
1	7.30			.093	9206	BB	0.00000	
2	12.02	#12.01		.089	189433	BB	.39405	Tetrachloro-m-xylene
3	13.95			.082	2456	BB	0.00000	
4	28.72			.092	6609	BB	0.00000	
5	40.03	#40.03		.221	187292	BB	.43165	Decachlorobiphenyl

Total Area : 394996 Total PPB : .826

Report Time : 1205 14Sep1997  
Method : /METHOD/P3082897.MTH  
Result File : /RESULT/P3082897\_018.RES

IEA Pesticide Standard Report

Sample Name : PIBLK9N Inj on 1121 29Aug1997  
Result File : /RESULT/P3082897\_018.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul

7.297

12.019

13.954

28.723

40.028

1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PIBLK1N

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK1N

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.025	_____
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : PIBLK1N Report No : 1.010  
 Result File : /RESULT/P3082897\_091.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 45.98 Mins. Injected on 1344 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 80 Bottle no. : 79  
 % Dil-Fact : 100.00

Run Status : RunStatusOK  
               EndOffBaseline  
               SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	12.01	#12.01	0.000	91827	BB	.19102	Tetrachloro-m-xylene
2	20.59		0.000	20	FF	0.00000	
3	20.69	20.72	0.000	11255	FF	.02544	Aldrin ok rounds ✓
4	20.82		0.000	109	FF	0.00000	
5	40.03	#40.03	0.000	99089	BB	.22837	Decachlorobiphenyl

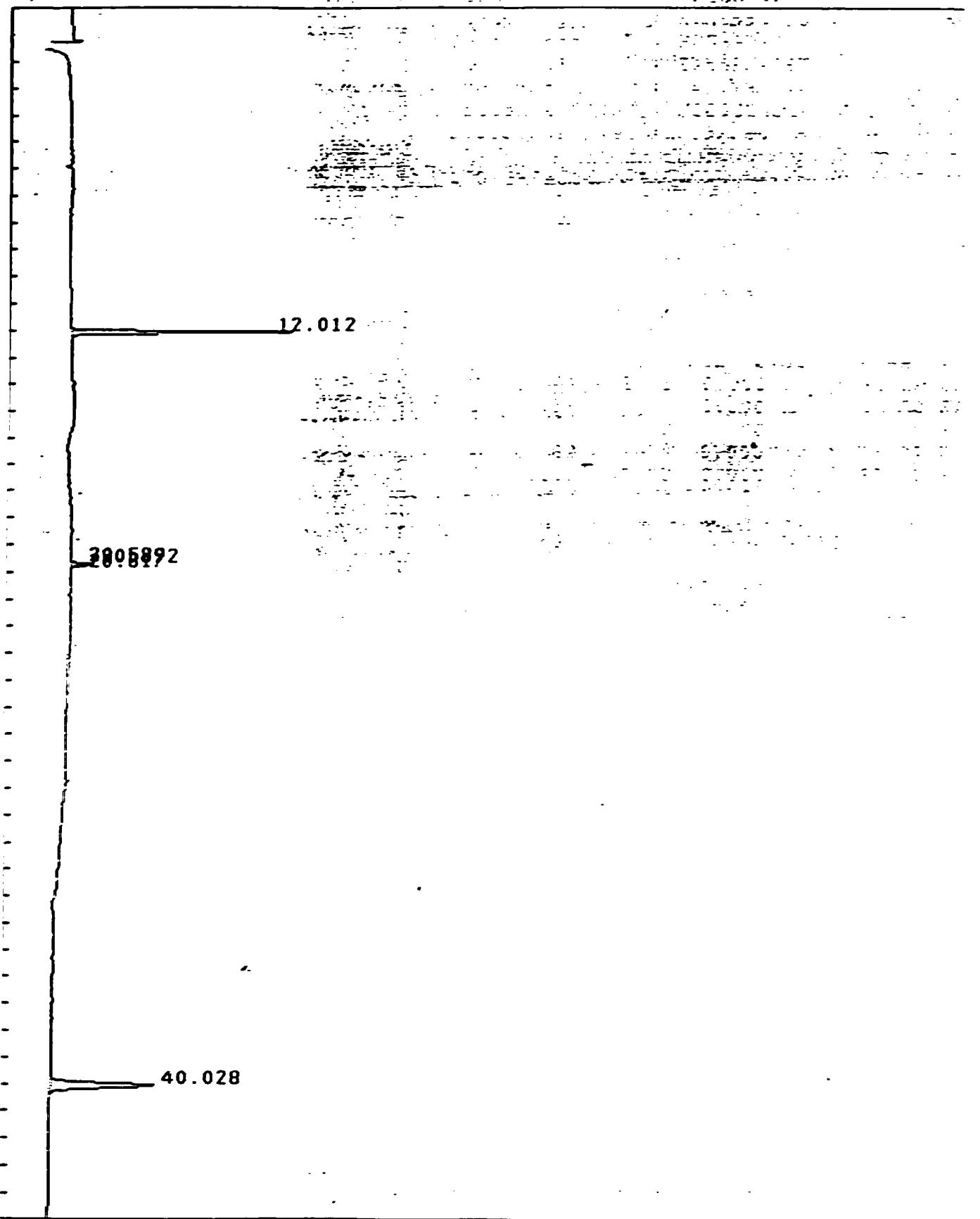
Total Area : 202301 Total PPB : .445

Report Time : 1631 09Sep1997  
 Method : /METHOD/P3082897CLP.MTH  
 Result File : /RESULT/P3082897\_091.RES

ok  
9/9/97

UserModifiedFile

Sample Name : PIBLK1N Inj on 1344 08Sep1997  
Result File : /RESULT/P3082897\_091.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter,0.53mm ID Inj. Vol. : 1 uL



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

PIBLK1P

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PIBLK1P

Date Received: \_\_\_\_\_

Sample wt/vol: \_\_\_\_\_ (g/mL)

Date Extracted: \_\_\_\_\_

Concentrated Extract Volume: \_\_\_\_\_ (uL)

Date Analyzed: 09/09/97

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.010	U
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.010	U
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.020	U
72-55-9-----	4,4'-DDE	0.020	U
72-20-8-----	Endrin	0.020	U
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	U
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.010	U
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : PIBLK1P Report No : 14.000  
Result File : /RESULT/P3082897\_104.RES  
Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
Instrument : HP5890P3  
Calculation : ExternalSTD  
Run Time : 46.00 Mins. Injected on 0147 09Sep1997  
Sequence File : /SEQUENCE/P3082897CLP.SEQ  
Subseq/Sample : 3/ 93 Bottle no. : 92

\* Dil-Fact  
100.00

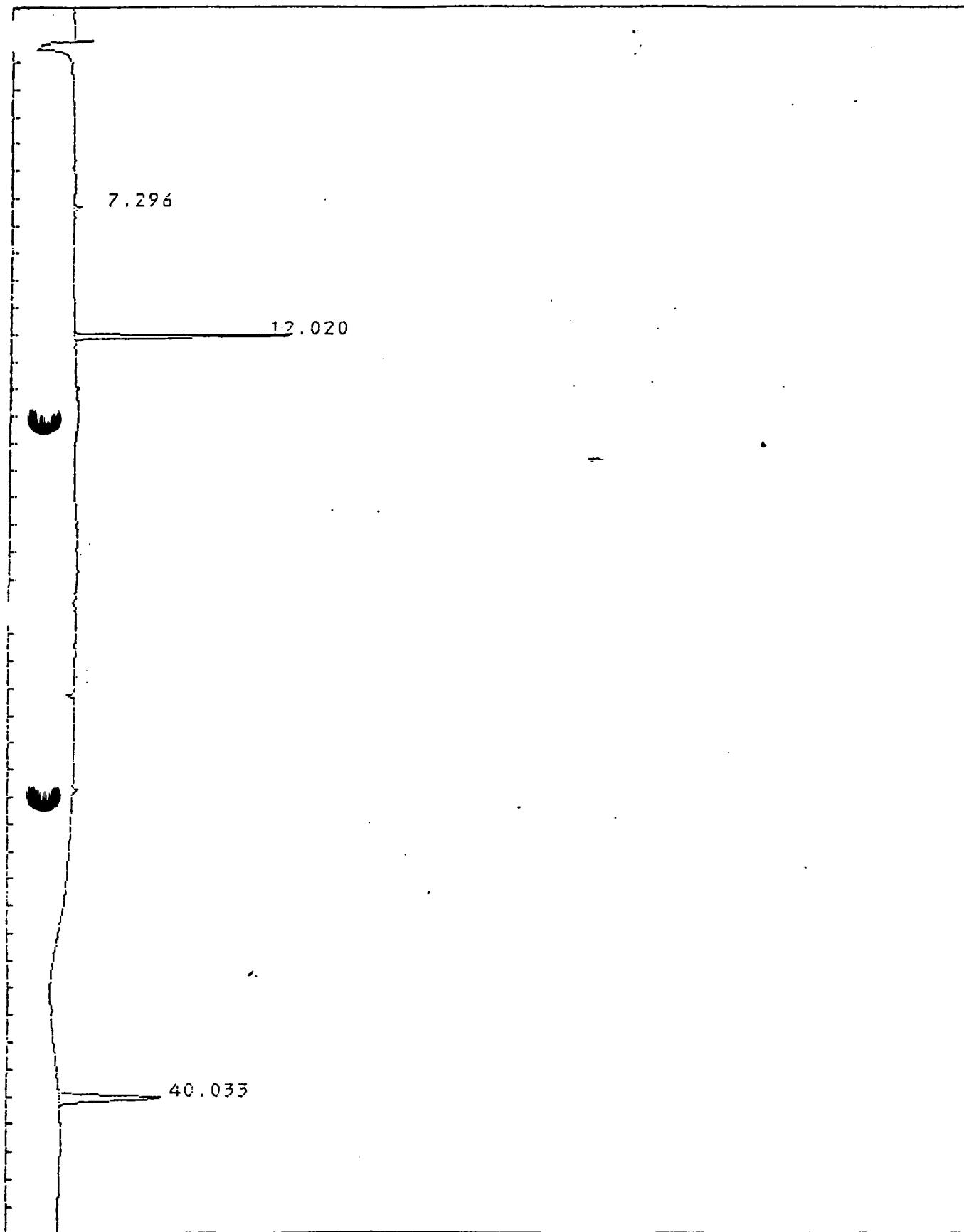
Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	7.30		.086	2790	BB	0.00000	
2	12.02	#12.01	.087	92599	BB	.19262	Tetrachloro-m-xylene
3	40.03	#40.03	.215	97302	BB	.22425	Decachlorobiphenyl

Total Area : 192690 Total PPB : .417

Report Time : 0236 09Sep1997  
Method : /METHOD/P3082897CLP.MTH  
Result File : /RESULT/P3082897\_104.RES

Sample Name : PIBLK1P Inj on 0147 09Sep1997  
Result File : /RESULT/P3082897\_104.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ECC1T1WMS

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MS

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.046	
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.058	
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.12	P
72-55-9-----	4, 4'-DDE	0.12	P
72-20-8-----	Endrin	0.15	
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4, 4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.049	
50-29-3-----	4, 4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.062	P
8001-35-2-----	Toxaphene	0.99	JP
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : 970836701MS Report No : 5.010  
 Result File : /RESULT/P3082897\_095.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 1726 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 84 Bottle no. : 83

% Dil-Fact

~~100.00~~ ~~20.00~~  
~~100.00~~

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	5.07		.095	5445	BV	0.00000	
2	5.38		.083	10479	PV	0.00000	
3	5.56		.089	3631	VV	0.00000	
4	5.81		.110	4919	VV	0.00000	
5	5.93		.066	5012	VB	0.00000	
6	6.11		.102	4413	BV	0.00000	
7	6.35		.143	8930	VV	0.00000	
8	6.60		.075	73970	VV	0.00000	
9	6.84		.100	5467	VV	0.00000	
10	6.98		.120	4529	VV	0.00000	
11	7.29		.101	69551	VV	0.00000	
12	7.52		.073	13852	VV	0.00000	
13	7.64		.093	103242	VB	0.00000	
14	8.35		.099	4812	BV	0.00000	
15	8.77		.089	9954	VV	0.00000	
16	8.89		.091	39623	VV	0.00000	
17	9.05		.112	90288	VV	0.00000	
18	9.33		.202	29134	VV	0.00000	
19	9.64		.178	75069	VV	0.00000	
20	10.20		.180	30679	PV	0.00000	
21	10.32		.117	15195	VV	0.00000	
22	10.47		.153	13599	VV	0.00000	
23	10.63		.121	16140	VV	0.00000	
24	10.76		.105	12296	VV	0.00000	
25	10.90		.142	20295	VV	0.00000	
26	11.04		.098	10801	VV	0.00000	
27	11.18		.126	20143	VV	0.00000	
28	11.42		.126	137954	VV	0.00000	
29	11.76		.181	63046	VV	0.00000	
30	12.02	#12.01	.118	94522	VV	.03952	Tetrachloro-m-xylene
31	12.30		.290	47991	VV	0.00000	
32	12.59		.192	30686	VV	0.00000	
33	12.96		.193	49256	VV	0.00000	
34	13.21		.219	36172	VV	0.00000	
35	13.46		.194	34040	VV	0.00000	
36	13.66		.145	32275	VV	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
37	14.06		.110	48362	VV	0.00000	
38	14.18		.112	190096	VV	0.00000	
39	14.38		.091	21129	VV	0.00000	
40	14.51		.135	49429	VV	0.00000	
41	14.73		.209	44363	VV	0.00000	
42	15.03		.179	42119	VV	0.00000	
43	15.44		.145	24924	VV	0.00000	
44	15.66		.266	37307	VV	0.00000	
45	15.98		.206	24548	VV	0.00000	
46	16.30		.148	57819	VV	0.00000	
47	16.43		.079	15629	VV	0.00000	
48	16.57		.217	47722	VV	0.00000	
49	16.90		.156	115442	VV	0.00000	
50	17.05		.106	101383	VV	0.00000	
51	17.27	17.27	.108	118358	VV	<del>.04678</del>	gamma-BHC (Lindane)
52	17.45		.115	20597	VV	0.00000	
53	17.68	17.66	.173	56076	VV	.18196	<del>beta-BHC NC</del>
54	17.90		.116	104444	VV	0.00000	
55	18.08		.118	68856	VV	0.00000	
56	18.29		.141	42048	VV	0.00000	
57	18.55		.204	41422	VV	-	0.00000
58	18.73		.129	45337	VV	0.00000	
59	18.86		.212	61578	VV	0.00000	
60	19.15	19.16	.150	35824	VV	<del>.06574</del>	<del>Heptachlor</del> has no conf.
61	19.45		.203	102140	VV	0.00000	
62	19.68		.201	155143	VV	0.00000	
63	19.98		.128	67233	VV	0.00000	
64	20.11		.102	23164	VV	0.00000	
65	20.34		.144	35258	VV	0.00000	
66	20.46		.126	27764	VV	0.00000	
67	20.67	20.72	.115	46444	VV	<del>.10947</del>	<del>NC</del>
68	20.79		.183	73512	VV	0.00000	
69	21.12		.131	52894	VV	0.00000	
70	21.27		.143	46245	VV	0.00000	
71	21.72		.195	32141	VV	0.00000	
72	21.92		.149	36168	VV	0.00000	
73	22.03		.115	31353	VV	0.00000	
74	22.16		.104	28565	VV	0.00000	
75	22.31		.162	36689	VV	0.00000	
76	22.54		.121	46064	VV	0.00000	
77	22.67		.125	73696	VV	0.00000	
78	22.95		.161	91354	VV	0.00000	
79	23.14	23.14	.157	255950	VV	<del>.10738</del>	Heptachlor epoxide
80	23.66		.145	101264	VV	0.00000	
81	23.92	23.92	.112	199339	VV	<del>.04655</del>	<del>ok</del> gamma-Chlordane <del>OK</del>
82	24.23		.207	67703	VV	0.00000	
83	24.49	24.52	.155	67177	VV	.15783	<del>alpha-Chlordane NC</del>
84	24.59	24.58	.057	15929	VV	.03897	<del>Ergoaliferin - not in sample</del>
85	24.67		.103	31106	VV	0.00000	
86	24.88		.142	32672	VV	0.00000	
87	24.98		.163	29634	VV	0.00000	
88	25.11		.111	38401	VV	0.00000	

9/20/99  
HJ.

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
89	25.40	25.40	.118	370225 VV	.2080	1.03975	4, 4' DDE
90	25.54		.058	23010 VV		0.00000	
91	25.70	25.70	.106	300858 VV	.15914	.79569	Dieldrin DK
92	25.87		.101	51652 VV		0.00000	
93	25.96		.081	31733 VV		0.00000	
94	26.08		.105	41040 VV		0.00000	
95	26.23		.139	43431 VV		0.00000	
96	26.56		.261	106195 VV		0.00000	
97	26.70		.083	28207 VV		0.00000	
98	26.80		.080	38575 VV	.19348	0.00000	
99	26.92	26.92	.101	272769 VV	.19348	.91741	Endrin
100	27.15		.152	65078 VV		0.00000	
101	27.52	27.55	.178	71770 VV		.21746	Endosulfan II
102	27.69		.141	43418 VV		0.00000	
103	27.84		.103	31236 VV		0.00000	
104	27.96		.119	55029 VV		0.00000	
105	28.17		.156	50443 VV		0.00000	
106	28.31		.179	56853 VV		0.00000	
107	28.58	28.58	.115	26391 VV		.09213	Endrin aldehyde
108	28.71		.157	52418 VV		0.00000	
109	28.90		.170	56713 VV		0.00000	
110	29.12	29.11	.168	102587 VV	.0786	.35030	Endosulfan sulfate
111	29.50		.175	51597 VV		0.00000	
112	29.95		.185	70980 VV		0.00000	
113	30.57		.157	15926 VV		0.00000	
114	30.70		.105	10799 VV		0.00000	
115	30.87		.174	25254 VV		0.00000	
116	31.30	31.32	.091	2558 PV		.01864	Methoxychlor
117	33.27		.216	30477 PV		0.00000	
118	33.68		.261	18406 VV		0.00000	
119	34.20		.232	23860 VV		0.00000	
120	36.10		.250	14405 BV		0.00000	
121	40.02	#40.03	.225	70705 BB	.03259	.16295	Decachlorobiphenyl

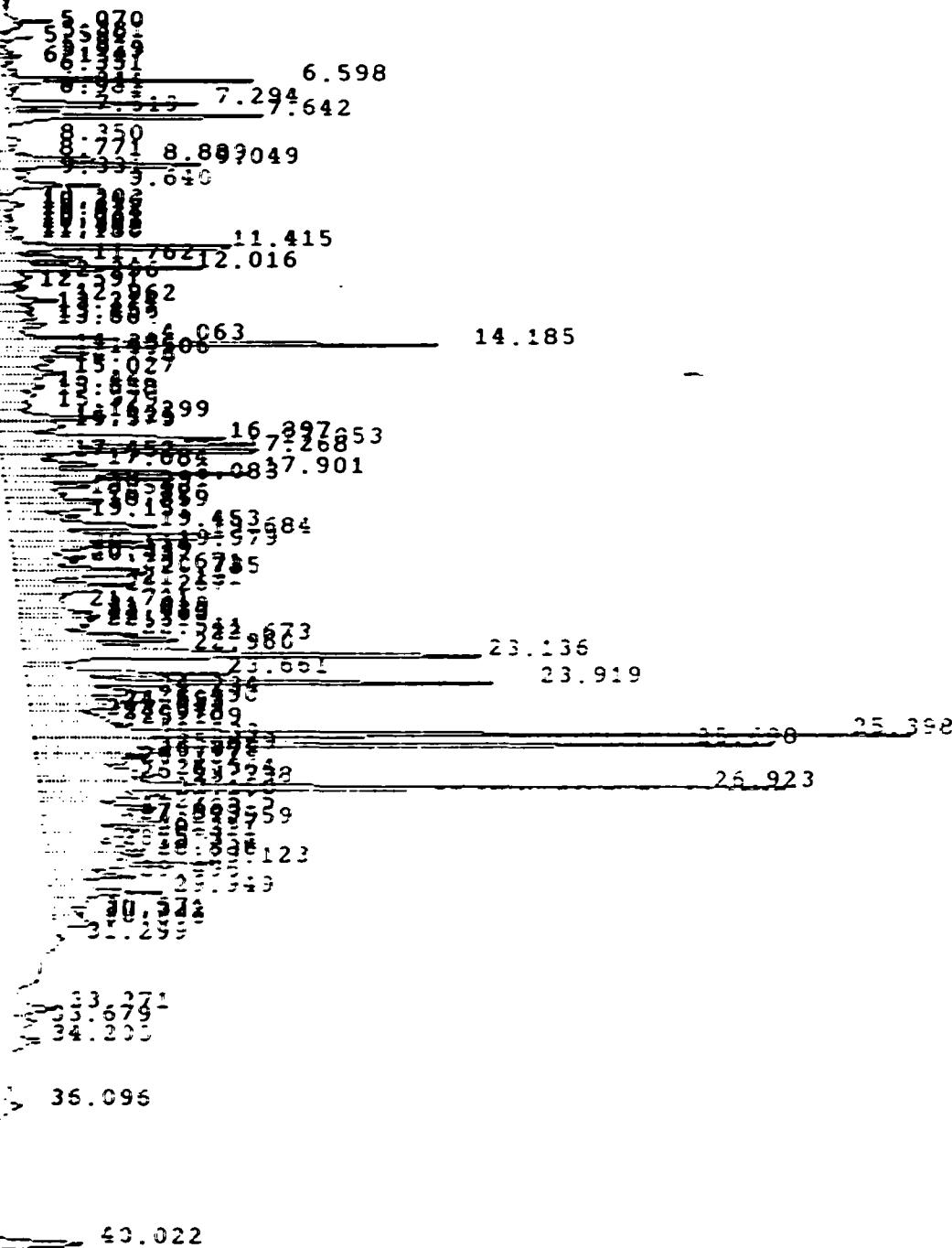
Total Area : 5773644 Total PPB : 5.546

Report Time : 2103 14Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_095.RES

9/20/97  
 11

IEA Pesticide Standard Report

Sample Name : 970836701MS Inj on 1726 08Sep1997  
Result File : /RESULT/P3082897\_095.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul



## IEA Pesticide Standard Report

Sample Name : 970836701MS Report No : 101.00  
 Result File : /RESULT/P2091297\_027.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 2348 19Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 15 Bottle no. : 15

% Dil-Fact

~~100.00~~ ~~20.00~~~~100.00~~

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.15		.044	3541	PV	0.00000	
2	3.37		.110	9073	VV	0.00000	
3	3.68		.085	16435	PV	0.00000	
4	3.81		.084	13582	VV	0.00000	
5	3.90		.053	2649	VV	0.00000	
6	4.00		.048	2800	VV	0.00000	
7	4.07		.086	12826	VV	0.00000	
8	4.28		.105	8155	VV	0.00000	
9	4.50		.067	14530	VV	0.00000	
10	4.80		.056	98584	VV	0.00000	
11	4.94		.049	3543	VV	0.00000	
12	4.99		.068	5516	VV	0.00000	
13	5.14		.092	7030	VV	0.00000	
14	5.27		.117	11838	VV	0.00000	
15	5.49		.061	4552	LV	0.00000	
16	5.56		.097	13268	VV	0.00000	
17	5.72		.071	3798	VV	0.00000	
18	5.89		.080	3785	VV	0.00000	
19	6.01		.073	26495	VV	0.00000	
20	6.21		.056	66896	VV	0.00000	
21	6.26		.064	78974	VV	0.00000	
22	6.43		.076	154927	VV	0.00000	
23	6.79		.164	26278	VV	0.00000	
24	6.95		.087	8642	VV	0.00000	
25	7.27		.077	5488	PV	0.00000	
26	7.46		.121	56905	VV	0.00000	
27	7.72	7.73	.078	210039	VV	<del>0.5837</del> <del>.25186</del>	Tetrachloro-m-xylene
28	7.78		.094	168841	VV	0.00000	
29	8.05		.196	38256	VV	0.00000	
30	8.49		.125	22924	VV	0.00000	
31	8.70		.090	30910	VV	0.00000	
32	8.90		.129	64362	VV	0.00000	
33	9.08		.090	10979	VV	0.00000	
34	9.22		.210	26927	VV	0.00000	
35	9.59		.097	72498	VV	0.00000	
36	9.91		.142	316335	VV	0.00000	
37	10.13		.153	57361	VV	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	10.33		.102	16937	UU	0.00000	
39	10.45		.109	17583	UU	0.00000	
40	10.62		.195	50176	UU	0.00000	
41	10.97		.171	39559	UU	0.00000	
42	11.25		.141	25773	UU	0.00000	
43	11.41		.107	39445	UU	0.00000	
44	11.57		.116	40852	UU	0.00000	
45	11.64		.106	36715	UU	0.00000	
46	11.86		.100	123708	UU	0.00000	
47	12.03		.104	254692	UU	0.00000	
48	12.30		.161	24921	UU	0.00000	
49	12.49		.119	22779	UU	0.00000	
50	12.68	12.70	.109	168928	UU .04762	.23810	gamma-BHC (Lindane)
51	12.88		.126	39577	UU	0.00000	
52	13.08		.130	94487	UU	0.00000	
53	13.26		.118	71888	UU	0.00000	
54	13.44		.126	93223	UU	0.00000	<i>not in matrix</i>
55	13.92		.163	107920	UU	0.00000	
56	14.05		.122	119407	UU	0.00000	
57	14.35		.190	25362	UU	0.00000	
58	14.86		.244	176898	UU -	0.00000	
59	15.06		.137	57893	UU	0.00000	
60	15.22		.139	53973	UU	0.00000	<i>not in matrix</i>
61	15.46		.157	122117	UU	0.00000	
62	15.75		.207	123740	UU	0.00000	
63	16.06		.205	43554	UU	0.00000	
64	16.54		.231	18381	UU	0.00000	
65	16.98		.219	117979	UU	0.00000	
66	17.16		.158	57629	UU	0.00000	
67	17.44		.174	12487	UU	0.00000	
68	18.04		.470	102822	UU	0.00000	
69	18.77		.238	275682	UU	0.00000	
70	19.56		.232	47570	UU	0.00000	
71	20.17	20.18	.188	279436	UU .05752	.28750	Heptachlor epoxide
72	20.66		.168	31847	UU	0.00000	
73	20.79		.198	38313	UU	0.00000	
74	21.01		.162	19779	UU	0.00000	
75	21.33		.217	90831	UU	0.00000	
76	22.18		.271	105019	PU	0.00000	
77	22.64	22.58	.159	2253	UU	.00249	<i>Endosulfan I Not in sample</i>
78	23.19	23.19	.184	297145	UU .0017	.30850	gamma-Chlordane
79	23.52		.172	13709	UU	0.00000	
80	23.83		.198	11484	UU	0.00000	
81	24.06		.163	8047	UU	0.00000	
82	24.42		.169	187053	UU	0.00000	
83	24.64	24.64	.182	365937	UU .12227	.61134	4,4'-DDE <i>Not in sample</i>
84	25.06		.161	22263	UU	0.00000	
85	25.51	25.52	.163	517218	UU .02467	.62336	Dieldrin
86	25.95		.343	115143	UU	0.00000	
87	26.60		.157	34331	UU	0.00000	
88	26.86	26.88	.149	494617	UU .15829	.75144	Endrin
89	27.32		.161	17623	UU	0.00000	

9/29/91

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
90	27.81		.336	185835	VV	0.00000	
91	28.46		.327	66147	VV	0.00000	
92	28.89		.169	72447	VV	0.00000	
93	29.13		.244	43607	VV	0.00000	
94	29.57		.217	58956	VV	0.00000	
95	29.78		.178	30414	VV	0.00000	
96	30.10	30.06	.237	48839	VV	.06324	Endosulfan II
97	30.41		.225	33399	VV	0.00000	
98	30.68		.257	58251	VV	0.00000	
99	31.17		.273	44248	VV	0.00000	<del>+ all lost in matrix</del>
100	31.47		.188	27456	VV	0.00000	
101	31.70		.278	126006	VV	0.00000	
102	32.35		.464	97718	VV	0.00000	
103	32.97		.308	51625	VV	0.00000	
104	33.23		.250	38613	VV	0.00000	
105	33.62		.223	113526	VV	0.00000	
106	34.11	34.11	.202	166166	VV	.04745	Endosulfan sulfate
107	34.63		.180	99690	VV	0.00000	
108	34.95		.150	14298	VV	0.00000	
109	35.23		.326	48130	VV	0.00000	
110	35.71		.353	100354	VV	-	0.00000
111	36.25		.168	61745	VV	0.00000	
112	36.58		.228	34007	VV	0.00000	
113	36.76		.157	14897	VV	0.00000	
114	37.42		.358	37513	VV	0.00000	
115	37.84		.174	19004	VV	0.00000	
116	38.13		.199	16087	VV	0.00000	
117	38.48		.290	34689	VV	0.00000	
118	38.70		.197	21616	VV	0.00000	
119	38.92		.191	24044	VV	0.00000	
120	39.12		.223	20877	VV	0.00000	
121	39.98	#39.99	.135	112913	VV	.02226	Decachlorobiphenyl

~~44425~~

Total Area : 8899362 Total PPB : 3.496

Report Time : 0034 20Sep1997  
 Method : /METHOD/F2091297CLP.MTH  
 Result File : /RESULT/F2091297\_027.RES

9/20/97

IEA Pesticide Standard Report

Sample Name : 970836701MS

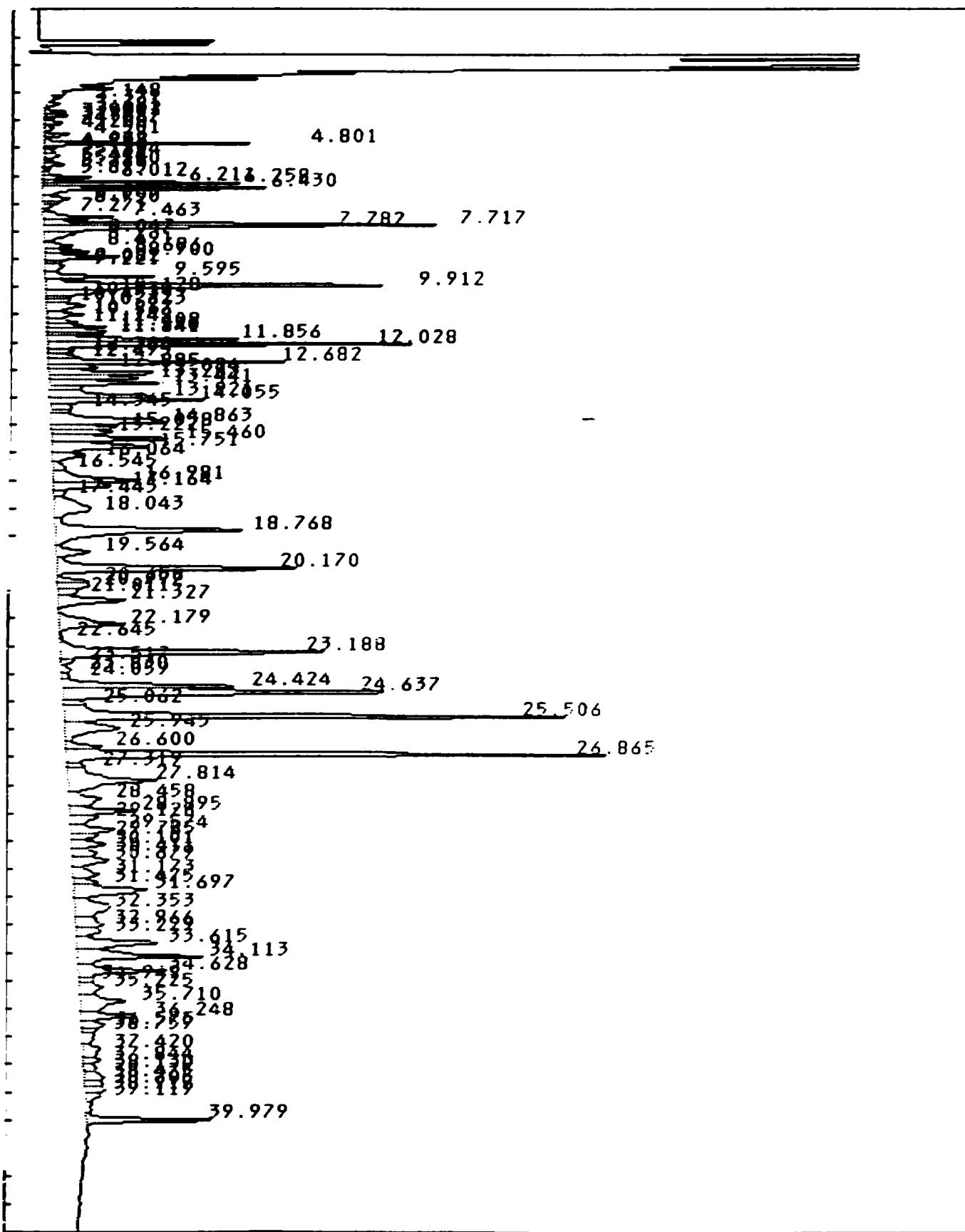
Inj on 2348 19Sep1997

Result File : /RESULT/P2091297\_027.RES

INSTRUMENT : HP5890P2

Column Type : DB-1701 30-Meter, 0.53mm ID

Inj. Vol. : 1 uL



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

ECC1T1WMSD

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: 970836701MSD

Date Received: 08/16/97

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.049	
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.064	P
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.13	P
72-55-9-----	4,4'-DDE	0.10	P
72-20-8-----	Endrin	0.15	P
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.063	P
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.020	U
7421-93-4-----	Endrin aldehyde	0.020	U
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.068	P
8001-35-2-----	Toxaphene	1.5	P
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

Sample Name : 970836701MSD Report No :102.00  
 Result File : /RESULT/P2091297\_028.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5390P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0042 20Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3/ 16 Bottle no. : 16

**% Dil-Fact**

~~+00.00~~ ~~xc.00~~  
~~xx/xx/xx~~

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.15		.055	4088	PU	0.00000	
2	3.37		.123	8420	UU	0.00000	
3	3.68		.084	13188	PU	0.00000	
4	3.81		.101	17501	UU	0.00000	
5	4.00		.053	3372	UU	-	0.00000
6	4.07		.096	11122	UU	0.00000	
7	4.28		.114	8077	UU	0.00000	
8	4.50		.078	19375	UU	0.00000	
9	4.80		.060	72308	UU	0.00000	
10	4.99		.072	4432	UU	0.00000	
11	5.14		.078	5194	UU	0.00000	
12	5.19		.053	3651	UU	0.00000	
13	5.26		.086	7687	UU	0.00000	
14	5.36		.069	3676	UU	0.00000	
15	5.49		.063	4541	UU	0.00000	
16	5.59		.108	5679	UU	0.00000	
17	5.71		.073	4231	UU	0.00000	
18	5.89		.084	4161	UU	0.00000	
19	6.01		.079	19946	UU	0.00000	
20	6.26		.098	99275	UU	0.00000	
21	6.43		.076	104245	UU	0.00000	
22	6.79		.165	20043	UU	0.00000	
23	6.95		.083	6722	UU	0.00000	
24	7.08		.100	5112	UU	0.00000	
25	7.46		.130	41402	FU	0.00000	
26	7.71	7.73	.078	216705	UU	.00000	-25985 Tetrachloro-m-xylene
27	7.78		.090	169257	UU	0.00000	
28	8.05		.098	14202	UU	0.00000	
29	8.17		.134	14189	UU	0.00000	
30	8.49		.138	21266	UU	0.00000	
31	8.70		.092	20211	UU	0.00000	
32	8.90		.155	55173	UU	0.00000	
33	9.23		.094	8347	UU	0.00000	
34	9.28		.100	8635	UU	0.00000	
35	9.60		.096	72310	UU	0.00000	
36	9.91		.138	332715	UU	0.00000	
37	10.13		.154	50487	UU	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
38	10.33		.104	15705	VV	0.00000	
39	10.45		.107	15634	VV	0.00000	
40	10.63		.200	35340	VV	0.00000	
41	10.96		.127	22454	VV	0.00000	
42	11.08	11.06	.110	10965	VV	.01662	<i>alpha-BHC</i> PC
43	11.25		.126	23009	VV	0.00000	
44	11.41		.106	40132	VV	0.00000	
45	11.57		.106	37726	VV	0.00000	
46	11.64		.110	41236	VV	0.00000	
47	11.86		.100	137668	VV	0.00000	
48	12.03		.102	292244	VV	0.00000	
49	12.30		.149	21918	VV	0.00000	
50	12.49		.118	25918	VV	0.00000	
51	12.68	12.70	.112	175543	VV	.04949	<i>gamma-BHC (Lindane)</i>
52	12.88		.126	44910	VV	0.00000	
53	13.08		.133	106905	VV	0.00000	
54	13.26		.117	46576	VV	0.00000	
55	13.44		.127	117509	VV	0.00000	<i>x hept. hex in solvent</i>
56	13.91		.165	169988	VV	0.00000	
57	14.05		.110	59093	VV	0.00000	
58	14.30		.212	37664	VV	0.00000	
59	14.46		.088	11908	VV	0.00000	
60	14.86		.251	232104	VV	0.00000	
61	15.06		.138	76508	VV	0.00000	
62	15.22		.135	65853	VV	0.00000	<i>- Aldrin</i>
63	15.46		.161	162482	VV	0.00000	
64	15.75		.205	152248	VV	0.00000	
65	16.06		.204	55617	VV	0.00000	
66	16.55		.225	22546	VV	0.00000	
67	16.98		.226	161874	VV	0.00000	
68	17.16		.145	37550	VV	0.00000	
69	17.45		.173	16928	VV	0.00000	
70	17.96		.402	138850	VV	0.00000	
71	18.40		.233	23354	VV	0.00000	
72	18.77		.250	344837	VV	0.00000	
73	19.58		.265	33643	VV	0.00000	
74	20.17	20.18	.216	311267	VV	.00407	<i>Heptachlor epoxide</i>
75	20.66		.193	57406	VV	0.00000	
76	20.79		.170	48260	VV	0.00000	
77	21.02		.174	34094	VV	0.00000	
78	21.33		.227	116943	VV	0.00000	
79	22.18		.271	141593	VV	0.00000	
80	22.65	22.58	.174	6853	VV	.00758	<i>Endosulfan I</i>
81	23.19	23.19	.227	326915	VV	.00748	<i>gamma-Chlordane</i>
82	23.86		.236	24997	VV	0.00000	
83	24.06		.139	10039	VV	0.00000	
84	24.42		.182	249575	VV	0.00000	
85	24.64	24.64	.193	334028	VV	.52911	<i>4,4'-DDE</i> <i>not in sample</i>
86	25.07		.182	41517	VV	0.00000	
87	25.51	25.52	.175	525440	VV	.12665	<i>Dieldrin</i>
88	25.94		.364	180955	VV	0.00000	
89	26.60		.169	56164	VV	0.00000	

*4,4'-DDE* *not in sample* *fortd*  
*9/20/99*  
*(2)*

## IEA Pesticide Standard Report

Pk #	RT	ID-tm	Peak Width	Area	Code	PPB	Name
90	26.87	26.88	.155	500010	UU .15193	.75964	Endrin
91	27.33		.189	44797	UU	0.00000	
2	27.46		.136	32325	UU	0.00000	
93	27.82		.298	170320	UU	0.00000	
94	28.03		.188	68856	UU	0.00000	
95	28.47		.252	74311	UU	0.00000	
96	28.65		.136	34077	UU	0.00000	
97	28.90		.181	116757	UU	0.00000	
98	29.13		.261	69260	UU	0.00000	
99	29.58		.233	82121	UU	0.00000	
100	29.80		.195	60255	UU	0.00000	
101	30.11	30.06	.247	84431	UU	.10932	<del>Endosulfan II</del>
102	30.40		.241	61709	UU	0.00000	
103	30.68		.278	98974	UU	0.00000	
104	31.18		.297	80202	UU	0.00000	<del>X-DOT TEST IN MATRIX</del>
105	31.48		.194	46828	UU	0.00000	
106	31.70		.306	173400	UU	0.00000	
107	32.29		.393	137889	UU	0.00000	
108	32.61		.134	28061	UU	0.00000	
109	32.98		.365	91939	UU	0.00000	
110	33.24		.217	56779	UU	-	0.00000
111	33.62		.243	189721	UU	0.00000	
112	34.12	34.11	.248	211684	UU .06297	.31497	<del>Endosulfan sulfate</del>
113	34.63		.249	118092	UU	0.00000	
114	35.22		.400	104870	UU	0.00000	
115	35.71		.394	159109	UU	0.00000	
116	36.25		.177	108662	UU	0.00000	
7	36.58		.219	56192	UU	0.00000	
118	36.76		.172	28168	UU	0.00000	
119	37.46		.409	76215	UU	0.00000	
120	37.85		.185	30412	UU	0.00000	
121	38.12		.210	29789	UU	0.00000	
122	38.47		.288	59135	UU	0.00000	
123	38.70		.181	34484	UU	0.00000	
124	38.92		.206	43556	UU	0.00000	
125	39.12		.230	39331	UU	0.00000	
126	39.66		.210	14761	UU	0.00000	
127	39.98	#39.99	.149	117515	UU .62347	.41504	Decachlorobiphenyl
128	40.50		.251	10013	UU	0.00000	

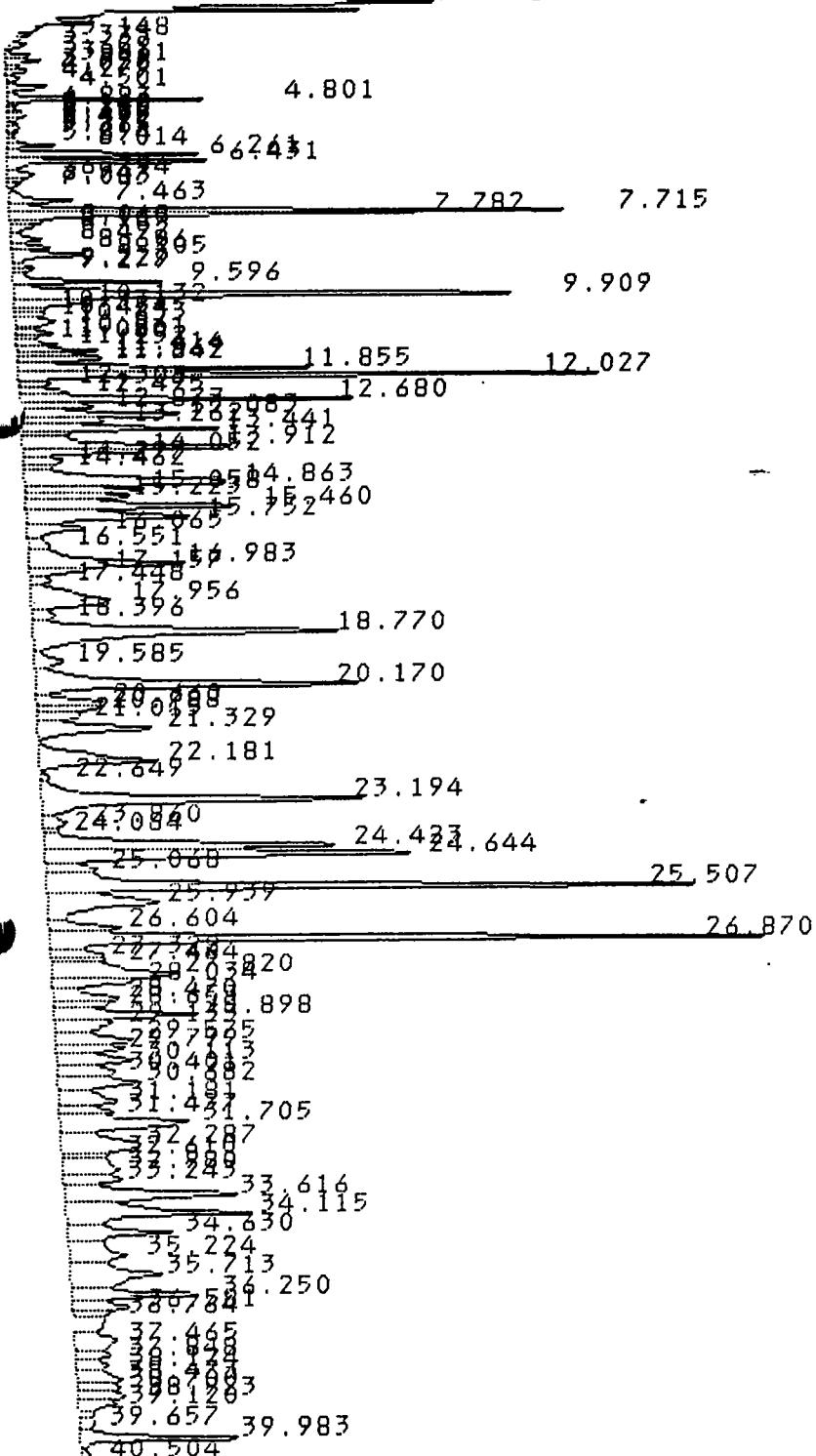
Total Area : 10506444 Total PPB : 3.653

Report Time : 0127 20Sep1997  
 Method : /METHOD/P2091297CLP.MTH  
 Result File : /RESULT/P2091297\_028.RES

9/20/97

## IEA Pesticide Standard Report

Sample Name : 970836701MSD Inj on 0042 20Sep1997  
Result File : /RESULT/P2091297\_028.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## LEA Pesticide Standard Report

Sample Name : 970836701MSD Report No : 5.010  
 Result File : /RESULT/P3082897\_096.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected at 1822 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 85 Bottle no. : 84

\* Dil-Fact

~~100.00~~ 20.00  
10/24/97

Run Status : RunStatusOK  
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	5.06		.097	4550	BV	0.00000	
2	5.39		.088	13804	PV	0.00000	
3	5.83		.124	5349	VV	0.00000	
4	5.92		.064	2954	VV	0.00000	
5	6.11		.125	6342	PV	0.00000	
6	6.36		.141	9861	VV	0.00000	
7	6.60		.080	65521	VV	0.00000	
8	6.85		.092	6732	VV	0.00000	
9	7.30		.093	57613	VV	0.00000	
10	7.52		.070	8340	PV	0.00000	
11	7.65		.101	71734	VV	0.00000	
12	8.34		.097	3651	BV	0.00000	
13	8.45		.102	6100	VV	0.00000	
14	8.90		.099	61154	VV	0.00000	
15	9.05		.107	105790	VV	0.00000	
16	9.33		.162	18407	VV	0.00000	
17	9.54		.163	53563	VV	0.00000	
18	9.88		.103	11108	VV	0.00000	
19	10.21		.175	19115	PV	0.00000	
20	10.32		.101	7013	VV	0.00000	
21	10.47		.117	3161	VV	0.00000	
22	10.64		.110	7091	VV	0.00000	
23	10.77		.133	5537	VV	0.00000	
24	10.89		.131	11953	VV	0.00000	
25	11.17		.103	7498	VV	0.00000	
26	11.42		.112	138101	VV	0.00000	
27	11.77		.184	54587	VV	0.00000	
28	12.02	#12.01	.109	81357	VV	<del>.03447</del> ← 17325	Tetrachloro-m-xylene
29	12.31		.291	34743	VV	0.00000	
30	12.59		.170	20830	VV	0.00000	
31	12.97		.181	38630	VV	0.00000	
32	13.21		.193	31704	VV	0.00000	
33	13.45		.182	27614	VV	0.00000	
34	13.67		.152	21163	VV	0.00000	
35	13.81		.118	10710	VV	0.00000	
36	14.07		.099	44107	VV	0.00000	

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
37	14.19		.108	219998	VV	0.00000	
38	14.39		.097	21542	VV	0.00000	
39	14.51		.135	38196	VV	0.00000	
40	14.72		.199	39219	VV	0.00000	
41	15.02		.201	41805	VV	0.00000	
42	15.43		.236	34530	VV	0.00000	
43	15.65		.236	35828	VV	0.00000	
44	16.30		.158	65631	VV	0.00000	
45	16.56		.247	57450	VV	0.00000	
46	16.89		.128	106226	VV	0.00000	
47	17.06		.108	137627	VV	0.00000	
48	17.27	17.27	.108	128069	VV	<del>0.5000</del> .2504	gamma-BHC (Lindane)
49	17.45		.112	22246	VV	0.00000	
50	17.69	17.66	.163	58906	VV	.22359	<del>beta-BHC</del> NC
51	17.91		.127	71551	VV	0.00000	
52	18.09		.116	82967	VV	0.00000	
53	18.29		.132	57113	VV	0.00000	
54	18.54		.197	57785	VV	0.00000	
	18.73		.135	67853	VV	0.00000	
56	18.95		.199	68018	VV	0.00000	
57	19.16	19.16	.155	49772	VV	<del>0.00133</del> -	Heptachlor has no tent
58	19.45		.240	96135	VV	0.00000	
59	19.69		.204	226518	VV	0.00000	
60	19.98		.128	101736	VV	0.00000	
61	20.12		.108	38916	VV	0.00000	
62	20.34		.162	36532	VV	0.00000	
63	20.46		.131	36626	VV	0.00000	
54	20.67	20.72	.126	77087	VV	<del>0.17420</del> -	Aldrin
65	20.78		.187	1026556	VV	0.00000	
66	21.12		.126	73894	VV	0.00000	
67	21.27		.150	76741	VV	0.00000	
68	21.44		.154	41944	VV	0.00000	
69	21.64		.126	34131	VV	0.00000	
70	21.92		.160	50422	VV	0.00000	
71	22.05		.111	46504	VV	0.00000	
	22.16		.106	54533	VV	0.00000	
73	22.28		.166	62384	VV	0.00000	
74	22.54		.127	78777	VV	0.00000	
75	22.68		.129	91186	VV	0.00000	
76	22.96		.172	155539	VV	0.00000	
77	23.13	23.14	.191	351357	VV	<del>0.47741</del> .73784	Heptachlor epoxide
78	23.66		.153	152028	VV	0.00000	
79	23.92	23.92	.116	223324	VV	<del>0.69696</del> .46480	gamma-Chlordane
80	24.15		.121	79876	VV	0.00000	
81	24.23		.119	77085	VV	0.00000	
82	24.52	24.52	.379	197686	VV	.46238	<del>alpha-Chlordane</del> NC
83	24.98		.191	90959	VV	0.00000	
84	25.11		.126	68725	VV	0.00000	
85	25.40	25.40	.141	457347	VV	<del>0.26690</del> 1.28445	Not in sample
86	25.70	25.70	.115	358216	VV	<del>0.18948</del> .94730	Dieldrin
87	25.87		.169	136677	VV	0.00000	
88	26.08		.106	73043	VV	0.00000	

1/1/91

9/20/91  
b/s

## IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
89	26.22		.156	90474	VV	0.00000	
90	26.45		.157	94391	VV	0.00000	
91	26.57		.144	94660	VV	0.00000	
92	26.93	26.92	.145	437495	VV	.29429	<del>1.17155</del> Endrin
93	27.16		.242	160735	VV	0.00000	
94	27.52	27.55	.191	137150	VV	.41555	<del>Endosulfan</del>
95	27.68		.150	83875	VV	0.00000	
96	27.96		.203	143975	VV	0.00000	
97	28.16		.159	90346	VV	0.00000	
98	28.32		.194	116378	VV	0.00000	DDT?
99	28.71		.254	159569	VV	0.00000	
100	28.90		.186	111977	VV	0.00000	
101	29.13	29.11	.209	190969	VV	.12447	<del>1.2205</del> Endosulfan sulfate
102	29.49		.207	136370	VV	0.00000	
103	29.55		.185	74641	VV	0.00000	
104	29.95		.233	174004	VV	0.00000	
105	30.21		.106	39296	VV	0.00000	
106	30.33		.140	53788	VV	0.00000	
107	30.58		.179	59510	VV	0.00000	
108	30.70		.124	44154	VV	0.00000	
109	30.87		.209	87641	VV	0.00000	
110	31.30	31.32	.157	39569	VV	.27752	<del>Methoxychlor</del>
111	31.46		.325	78697	VV	0.00000	
112	32.49		.284	41833	VV	0.00000	
113	33.27		.241	64427	VV	0.00000	
114	33.69		.288	30707	VV	0.00000	
115	34.20		.228	41599	VV	0.00000	
116	35.64		.209	11289	BV	0.00000	
117	36.11		.233	29134	VV	0.00000	
118	40.03	#40.03	.221	70316	BB	.03264	<del>1.18555</del> Decachlorobiphenyl

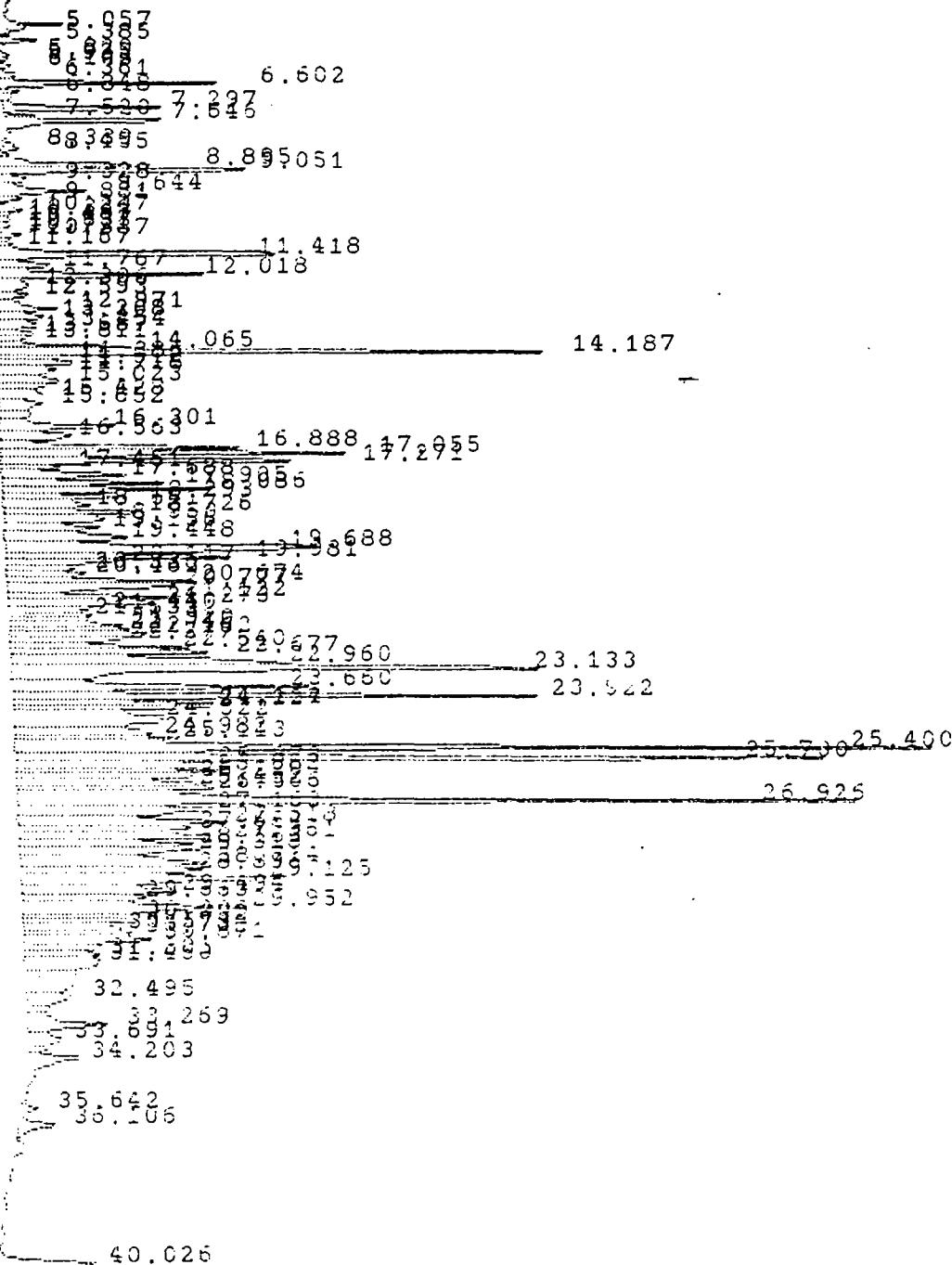
Total Area : 9070434 Total PPB : 7.803

Report Time : 0114 14Sep1997  
 Method : /METHOD/P3062897.MTH  
 Result File : /RESULT/P3062897\_096.RES

9/20/97

## IEA Pesticide Standard Report

Sample Name : 970836701MSD Inj on 1822 08Sep1997  
Result File : /RESULT/P3082897\_096.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 ul



1LCD  
LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PLCS01

Lab Name: INDUSTRIAL & ENVIRONMENTAL Contract: SOW 10/92

Lab Code: IEA Case No.: 1364-226

SDG No.: 08367

Lab Sample ID: PLCS01

Date Received: / /

Sample wt/vol: 1000 (g/mL) ML

Date Extracted: 08/21/97

Concentrated Extract Volume: 2000(uL)

Date Analyzed: 09/08/97

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6-----	alpha-BHC	0.010	U
319-85-7-----	beta-BHC	0.010	U
319-86-8-----	delta-BHC	0.010	U
58-89-9-----	gamma-BHC (Lindane)	0.030	P
76-44-8-----	Heptachlor	0.010	U
309-00-2-----	Aldrin	0.010	U
1024-57-3-----	Heptachlor epoxide	0.058	P
959-98-8-----	Endosulfan I	0.010	U
60-57-1-----	Dieldrin	0.12	P
72-55-9-----	4,4'-DDE	0.13	P
72-20-8-----	Endrin	0.13	P
33213-65-9-----	Endosulfan II	0.020	U
72-54-8-----	4,4'-DDD	0.020	U
1031-07-8-----	Endosulfan sulfate	0.020	P
50-29-3-----	4,4'-DDT	0.020	U
72-43-5-----	Methoxychlor	0.10	U
53494-70-5-----	Endrin ketone	0.0088	J
7421-93-4-----	Endrin aldehyde	0.0037	JP
5103-71-9-----	alpha-Chlordane	0.010	U
5103-74-2-----	gamma-Chlordane	0.064	P
8001-35-2-----	Toxaphene	1.0	U
12674-11-2-----	Aroclor-1016	0.20	U
11104-28-2-----	Aroclor-1221	0.40	U
11141-16-5-----	Aroclor-1232	0.20	U
53469-21-9-----	Aroclor-1242	0.20	U
12672-29-6-----	Aroclor-1248	0.20	U
11097-69-1-----	Aroclor-1254	0.20	U
11096-82-5-----	Aroclor-1260	0.20	U

## IEA Pesticide Standard Report

UserModifiedFile

Sample Name : PLC501 Report No : 8.020  
 Result File : /RESULT/P3082897\_098.RES  
 Column Type : RTX-35 30 Meter, 0.53mm ID Inj. Vol. : 1 uL  
 Instrument : HP5890P3  
 Calculation : ExternalSTD  
 Run Time : 46.00 Mins. Injected on 2013 08Sep1997  
 Sequence File : /SEQUENCE/P3082897CLP.SEQ  
 Subseq/Sample : 3/ 87 Bottle no. : 86

% Dil-Fact

100.00 20.00  
100/20 = 5

Run Status : RunStatusOK  
 EndOffBaseline  
 SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	6.36		0.000	3080	BV	0.00000	
2	7.30		0.000	5291	BB	0.00000	
3	8.90		0.000	56343	BV	0.00000	Dieldrin
4	9.69		0.000	3287	BB	0.00000	
5	12.02	#12.01	0.000	86499	BB	.03598	.17993 Tetrachloro-m-xylene
6	14.65		0.000	3969	BB	0.00000	
7	17.27	17.27	0.000	118005	BB	.04015	.23073 gamma-BHC (Lindane)
8	18.87		0.000	10132	BB	0.00000	
9	20.69	20.72	0.000	6448	BB	.01457	Aldrin NC
10	23.15	23.14	0.000	184412	BB	.07737	.38684 Heptachlor epoxide
11	23.92	23.92	0.000	195322	BB	.08490	.42401 gamma-Chlordane
12	25.41	25.40	0.000	318746	BV	.17984	.89521 4,4'-DDE
13	25.70	25.70	0.000	324306	VB	.17154	.85770 Dieldrin
14	26.93	26.92	0.000	275746	BB	.18548	.92742 Endrin
15	28.58	28.58	0.000	5334	BV	.9872	.01862 Endrin aldehyde
16	28.72		0.000	10146	VB	0.00000	
17	29.12	29.11	0.000	42620	BB	.02911	.14553 Endosulfan sulfate
18	31.87	31.89	0.000	14557	VB	.00882	.04409 Endrin ketone
19	40.04	#40.03	0.000	83281	FF	.03839	.19194 Decachlorobiphenyl

100/20 = 5

Total Area : 1747524 Total PPB : 4.317

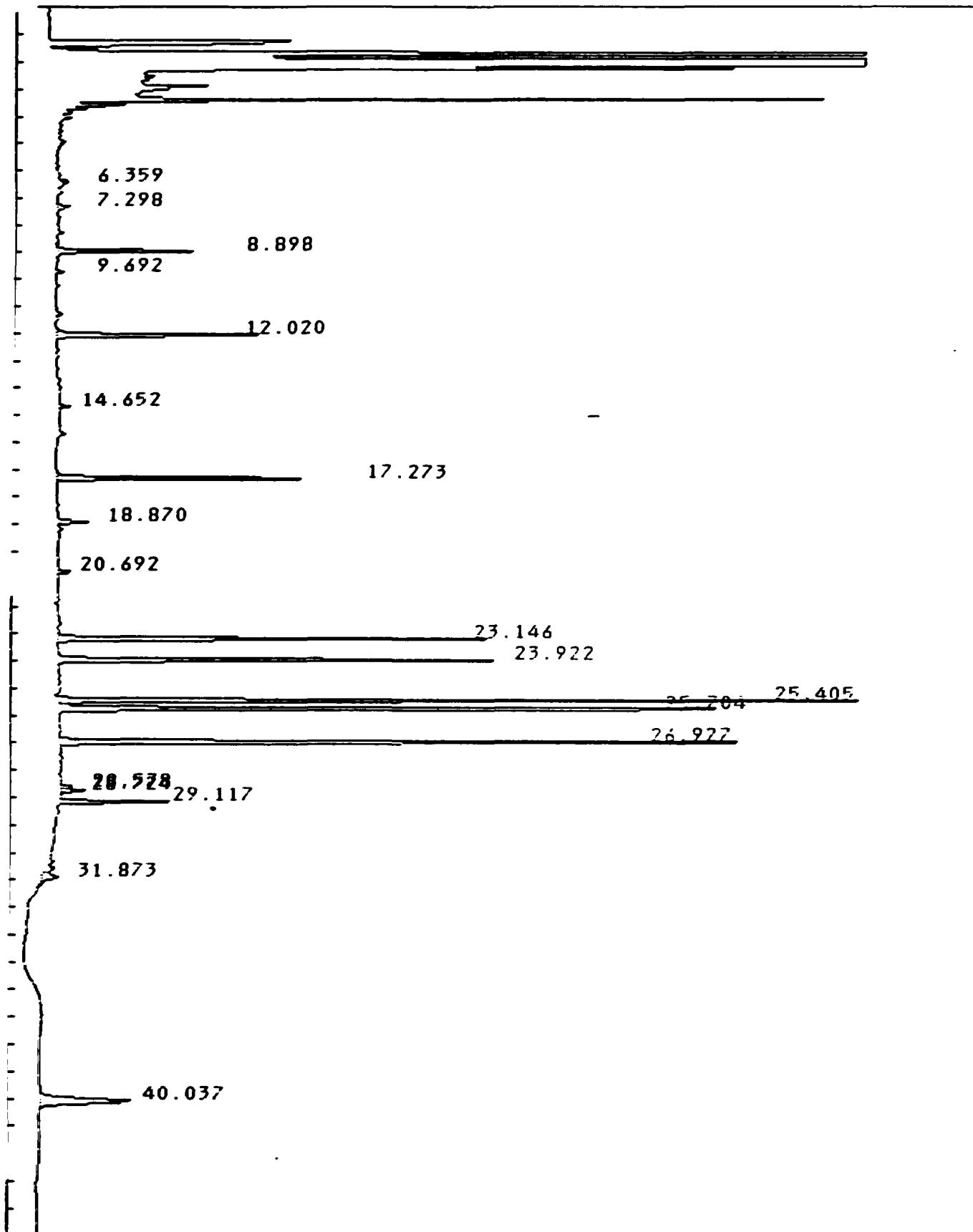
Report Time : 1641 20Sep1997  
 Method : /METHOD/P3082897.MTH  
 Result File : /RESULT/P3082897\_098.RES

9/20/97

IEA Pesticide Standard Report

UserModifiedFile

Sample Name : PLCS01 Inj on 2013 08Sep1997  
Result File : /RESULT/P3082897\_098.RES INSTRUMENT : HP5890P3  
Column Type : RTX-35 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



## IEA Pesticide Standard Report

Sample Name : PLCS01 Report No : 104.00  
 Result File : /RESULT/P2091297\_030.RES  
 Column Type : DB-1701 30 Meter, 0.53mm ID Inj. Vol. : 1 ul  
 Instrument : HP5890P2  
 Calculation : ExternalSTD  
 Run Time : 44.00 Mins. Injected on 0229 20Sep1997  
 Sequence File : /SEQUENCE/P2091297CLP.SEQ  
 Subseq/Sample : 3 / 18 Bottle no. : 18

% Dil-Fact

~~100.00~~ 20.00~~100.00~~

Run Status : RunStatusOK  
 EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	3.14		.037	1541	PV	0.00000	
2	3.29		.037	826	UV	0.00000	
3	3.42		.058	2966	UV	0.00000	
4	3.62		.092	3358	PV	0.00000	
5	3.81		.075	6009	UV	0.00000	
6	4.49		.094	2977	BV	0.00000	
7	4.85		.053	1076	UV	0.00000	
8	4.91		.059	1670	UV	0.00000	
9	5.22		.060	1426	UV	0.00000	
10	6.26		.058	55105	UV	0.00000	
11	6.43		.063	7165	UV	0.00000	
12	7.47		.080	1132	BV	0.00000	
13	7.73	7.73	.066	87224	UV	.02092 .10459	Tetrachloro-m-xylene
14	8.92		.093	2746	BV	0.00000	
15	9.27		.100	4929	BV	0.00000	
16	9.58		.093	1388	PV	0.00000	
17	12.10		.102	4156	BV	0.00000	
18	12.68	12.70	.086	105495	BB	.02984 .14869	gamma-BHC (Lindane)
19	13.66	13.68	.110	2563	BV	.00258	HeptachlorNC
20	13.90		.121	3614	VB	0.00000	
21	16.97		.165	21416	BB	0.00000	
22	20.16	20.18	.190	284492	BB	.05456 .29279	Heptachlor epoxide
23	23.18	23.19	.178	307753	BB	.06390 .31951	gamma-Chlordane
24	24.64	24.64	.164	417102	BV	.1214 .66071	4,4'-DDE
25	25.50	25.52	.146	504815	UV	.1216 .60841	Dieldrin
26	26.86	26.88	.141	436583	BV	.12265 .66327	Endrin
27	31.82		.141	19032	BB	0.00000	
28	32.47	32.47	.273	12624	BV	.00618 .03092	Endrin aldehyde
29	34.11	34.11	.119	66999	BV	.01994 .09969	Endosulfan sulfate
30	34.42	34.43	.118	2409	UV	.00593	MethoxychlorNC
31	34.63		.125	4578	UV	0.00000	
32	36.02	36.04	.209	27930	BV	.00887 .04436	Endrin ketone
33	37.20		.805	62398	UV	0.00000	
34	38.61		1.894	285443	UV	0.00000	
35	39.98	#39.99	.133	100843	UV	.01788 .09941	Decachlorobiphenyl
36	41.48		.930	56034	PV	.04677 0.00000	

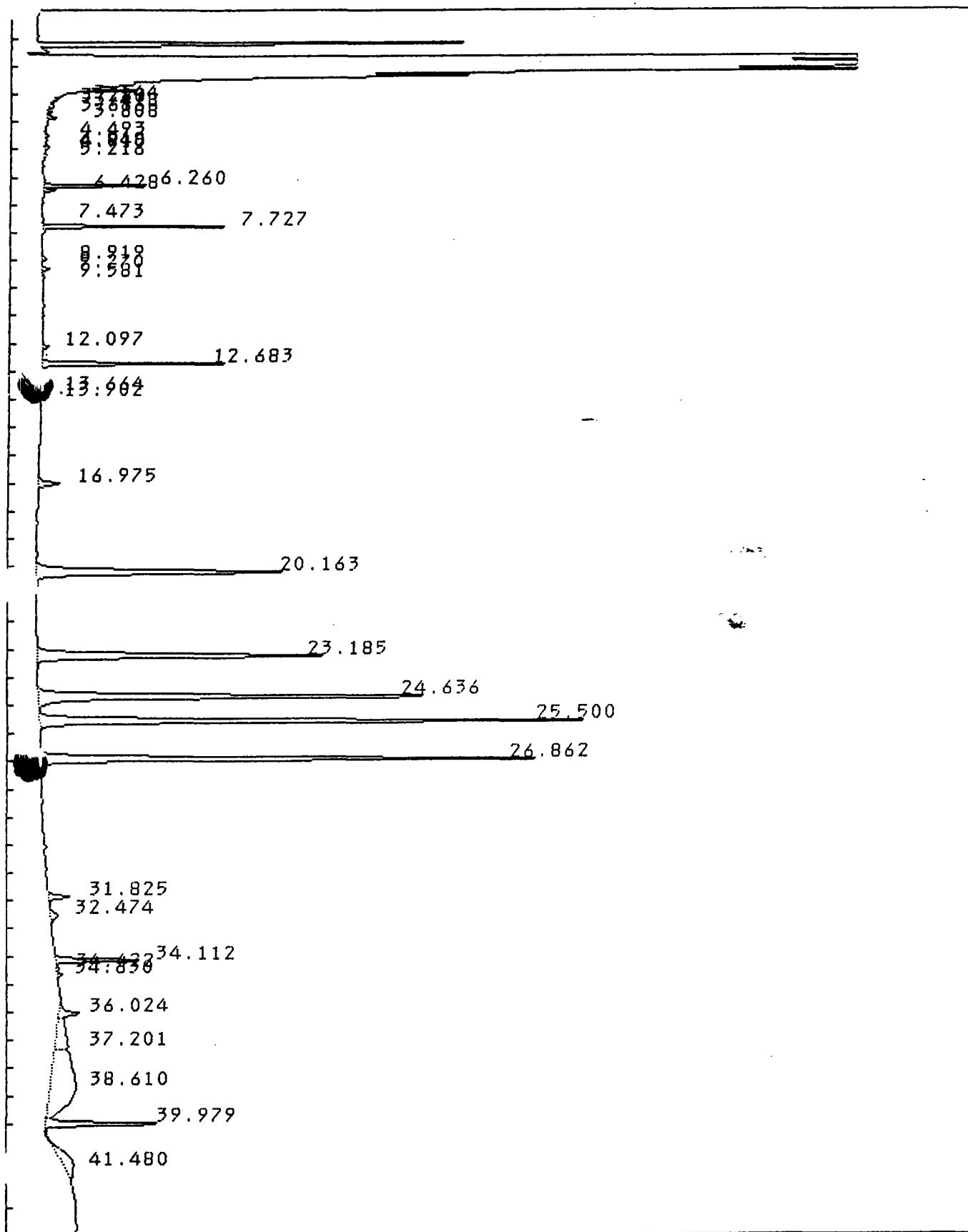
Total Area : 2907818 Total PPB : 3.081

9/00/97  
(f)

Report Time : 0314 20 Sep 1977  
Method : /METHOD/P2091297CLP.MTH  
Result File : /RESULT/P2091297\_030.RES

IEA Pesticide Standard Report

Sample Name : PLC501 Inj on 0229 20Sep1997  
Result File : /RESULT/P2091297\_030.RES INSTRUMENT : HP5890P2  
Column Type : DB-1701 30-Meter, 0.53mm ID Inj. Vol. : 1 uL



**COVER PAGE - INORGANIC ANALYSES DATA PACKAGE**

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

**Lab Code:** IEA      **Case No.:** 1364 226      **SAS No.:** \_\_\_\_\_ **SDG No.:** 08367

SC No.: ILM03

**EPA Sample No.**  
**1T1WDF**  
**1T1WF**  
**1T1WFD**  
**1T1WPS**  
**1T5WF**

Were ICP interelement corrections applied?

**Yes/No** YES

We... ICP background corrections applied ?  
If yes - were raw data generated before  
application of background corrections ?

**Yes/No** YES

Yes/No NO

#### **Comments:**

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

**Signature:** Donald C. Stogner **Name:** Donald C. Stogner

Date: 11-9/3/97 Title: Manager, Inorganics

COVER PAGE - IN

3 / 90

## INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

1T1WDF

**Le Code: IEA Case No: 1364 226 SAS No.: SDG No.: 08367**

**Matrix (soil/water): WATER**      Lab Sample ID: 970836702F

**Level (low/med):** LOW **Date Received:** 08/16/97

% Solids: \_\_\_\_\_ 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

**Color Before:** COLORLESS      **Clarity Before:** CLEAR      **Texture:**

**Color After:** COLORLESS      **Clarity After:** CLEAR      **Artifacts:**

**Comments:**

**FORM I - IN**

3 / 90

## **INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACTS

1T1WF

Ref. code: IEA Case No:1364 226 SAS No.: SDG No.: 98367

Matrix (soil/water): WATER Lab Sample ID: 970836701F

**Level (low/med):** LOW **Date Received:** 08/16/97

**Solids:** 6.0

**Concentration Units (ug/L or mg/kg dry weight): UG/L**

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.3	B		P
7440-38-2	Arsenic	1.1	B		P
7440-39-3	Barium	272			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7439-92-1	Lead	1.0	U		P
7439-96-5	Manganese	- 132			P
7440-82-0	Nickel	4.2	B		P
7440-22-4	Silver	1.0	U		P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	10.4	B		P
	Tin	2.0	U		P
	Cyanide	10.0	U		CA

**Color Before:** COLORLESS      **Clarity Before:** CLEAR      **Texture:**

**Color After:** COLORLESS      **Clarity After:** CLEAR      **Artifacts:**

#### **Comments:**

I  
**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

1T5WF

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACTS

La' Code: IEA Case No: 1364 226 SAS No.: SDG No.: 08367

Matrix (soil/water): WATER Lab Sample ID: 970836704F

**Level (low/med):** LOW **Date Received:** 08/16/97

**t Solids:** 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Color Before: COLORLESS Clarity Before: CLEAR Texture:

**Color After:** COLORLES      **Clarity After:** CLEAR      **Artifacts:**

#### **Comments:**

**2A**  
**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

La. Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

**Lab Code:** IEA             **Case No.:** 1364-226        **SAS No.:**             **SDG No.:** 08367

**Initial Calibration Source:** IV

**Continuing Calibration Source:** IV \_\_\_\_\_

**Concentration Units:** ug/L

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

## **INITIAL AND CONTINUING CALIBRATION VERIFICATION**

Name: INDUSTRIAL AND ENVIRONMENTAL CONTRACTS

**Lab Code:** IEA      **Case No.:** 1364 226      **SAS No.:**      **SDG No.:** 08367

Initial Calibration Source: IV

Continuing Calibration Source: IV

Concentration Units: ug/L

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

**FORM II (PART 1) - IN**

3 / 90

2A  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

**La** Name: **INDUSTRIAL AND ENVIRONMEN** Contract: \_\_\_\_\_

**Lab Code:** IIA      **Case No.:** 1364\_226    **SAS No.:** \_\_\_\_\_      **SDG No.:** 08367

**Initial Calibration Source:** IV

## **Continuing Calibration Source: IV**

**Concentration Units:** ug/L

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2B

La Jame: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

**Lab Code:** IEA      **Case No.:** 1364-226      **SAS No.:**            **SDG No.:** 08367

**AA CRDL Standard Source:** \_\_\_\_\_

## **ICP CRDL Standard Source: IV**

Concentration Units: ug/L

3

**Le** Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

**Lab Code:** IEA      **Case No.:** 1364 226      **SAS No.:** \_\_\_\_\_      **SDG No.:** 08367

### **Preparation Blank Matrix (soil/water): WATER**

**Preparation Blank Concentration Units (ug/L or mg/kg): UG/L**

3  
BLANKS

La Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

Lab Code: IEA      Case No.: 1364\_226    SAS No.:      SDG No.: 08367

Preparation Blank Matrix (soil/water): \_\_\_\_\_

Preparation Blank Concentration Units (ug/L or mg/kg): \_\_\_\_\_

4

**ICP INTERFERENCE CHECK SAMPLE**

Last Name: INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

**Lab Code:** IEA      **Case No.:** 1364 226      **SAS No.:** \_\_\_\_\_      **SDG No.:** 08367

**ICP ID Number:** 61T **ICS Source:** IV

**Concentration Units: ug/L**

**FORM IV - IN**

3 / 98

**5A**

**SPIKE SAMPLE RECOVERY**

EPA SAMPLE NO.

1T1WFS

**Lab Name:** INDUSTRIAL AND ENVIRONMEN

### **Contract:**

La Code: IEA

Case No.:1364 226 SAS No.: SDG No.: 08367

SDG No.: 08367

**Matrix (soil/water): WATER**

Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

### Comments:

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

1T1WFD

La' Code: IEA

Case No.: 1364-226 SAS No.: \_\_\_\_\_ SDG No.: 08367

SDG No.: 08367

**Matrix (soil/water): WATER**

**Level (low/med):** LOW

**# Solids for Sample:** 0.0

\* Solids for Duplicate: 0.0

**Concentration Units (ug/L or mg/kg dry weight): UG/L**

**LABORATORY CONTROL SAMPLE**

Lab Name: INDUSTRIAL AND ENVIRONMEN

**Contract:** \_\_\_\_\_

La. Code: IEEA \_\_\_\_\_ Case No.: 1364\_226 SAS No.: \_\_\_\_\_ SDG No.: 08367\_\_\_\_\_

Solid LCS Source: \_\_\_\_\_

### Aqueous LCS Source: IV

## **STANDARD ADDITION RESULTS**

**Lab Name:** INDUSTRIAL AND ENVIRONMEN

**Contract:** \_\_\_\_\_

Lab Code: IEA

Case No.:1364\_226 SAS No.: SDG No.:08367

**SAS No.:** \_\_\_\_\_

SDG No.: 08367

**Concentration Units:** ug/L

## ICP SERIAL DILUTION

Lab Name: INDUSTRIAL AND ENVIRONMENTAL CONTRACT:

1T1WFL

La' Code: IEA Case No.: 1364 226 SAS No.: SDG No.: 08367

**Matrix (soil/water): WATER**      **Level (low/med): LOW**

Concentration Units: ug/L

### Instrument Detection Limits (Quarterly)

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

**Lab Code:** IEA      **Case No.:** 1364\_226      **SAS No.:** \_\_\_\_\_      **SDG No.:** 08367

**IC. ID Number:** **ICPMS** **Date:** **05/08/97**

**Flame AA ID Number :** \_\_\_\_\_

**Furnace AA ID Number :** \_\_\_\_\_

**Comments:**

**FORM X - IN**

3 / 90

## 10 Instrument Detection Limits (Quarterly)

Lab Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

Lab Code: IEA Case No.: 1364\_226 SAS No.: SDG No.: 08367

IC ID Number: 61T Date: 07/30/97

Flame AA ID Number : \_\_\_\_\_

**Furnace AA ID Number :** \_\_\_\_\_

### **Comments:**

11A  
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACTS **Contract:** \_\_\_\_\_

Le Code: IIA      Case No.: 1364\_2 SAS No.:       SDG No.: 08367

**ICP ID Number:** 61T                              **Date:** 03/08/97

**Comments:**

11B  
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

**Lab Name:** INDUSTRIAL AND ENVIRONMEN **Contract:** \_\_\_\_\_

Le Code: IEA Case No.: 1364 2 SAS No.: SDG No.: 08367

ICP ID Number: 61T Date: 03/08/97

**Comments:**

**FORM XI (Part 2) - IN**

3 / 98

11B

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACTS **Contract:** \_\_\_\_\_

**L** Code: IIEA Case No.: 1364\_2 SAS No.: \_\_\_\_\_ SDG No.: 08367

**ICP ID Number:** 61T **Date:** 03/08/97

**Comments:**

11B

Lab Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

La Code: IEA Case No.: 1364 2 SAS No.: SDG No.: 08367

**ICP ID Number:** 61T      **Date:** 03/08/97

**Comments:**

12

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

Lr : Code: IIA Case No.: 1364\_226 SAS No.: SDG No.: 08367

**ICP ID Number:** ICPMS **Date:** 01/15/96

**Comments:**

---

---

---

---

12 ICP LINEAR RANGES (QUARTERLY)

Lab Name: INDUSTRIAL AND ENVIRONMEN Contract: \_\_\_\_\_

La' Code: IEA \_\_\_\_ Case No.: 1364\_226 \_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 08367

ICP ID Number: 61T \_\_\_\_\_ Date: 08/15/97

### Comments:

13  
**PREPARATION LOG**

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACT: \_\_\_\_\_

Le: Code: IEA Case No.: 1364-226 SAS No.: SDG No.: 08367

### **Method: P<sub>m</sub>**

13 PREPARATION LOG

**Lab Name:** INDUSTRIAL AND ENVIRONMEN **Contract:**

La Code: IEA Case No.:1364\_226 SAS No.: SDG No.:08367

### **Method: P**

**FORM XIII - IN**

3 / 90

13  
PREPARATION LOG

**Lab Name:** INDUSTRIAL AND ENVIRONMENTAL CONTRACTS **Contract:** \_\_\_\_\_

Le Code: IIEA Case No.:1364 226 SAS No.:  SDG No.:08367

**Method: CA**

**FORM XIII - IN**

3 / 90

14  
ANALYSIS RUN LOG

Lab Name: INDUSTRIAL AND ENVIRONMEN

## **Contract:**

La Code: IEA Case No.: 1364 226

SAS No.: \_\_\_\_\_ SDG No.: 08367

Instrument ID Number: ICPMS

### **Method: P**

Start Date: 08/27/97

End Date. 08/27/97

14  
ANALYSIS RUN LOG

Lab Name: INDUSTRIAL AND ENVIRONMEN

Contract: \_\_\_\_\_

La Code: IEA Case No.: 1364\_226

SAS No.: \_\_\_\_\_ SDG No.: #8367\_

Instrument ID Number: 61T

Method: P

Start Date: 08/28/97

End Date: 08/28/97

EPA Sample No.	D/F	Time	% R	Analytes															
				S B	A S	B A	B E	C D	P B	M N	N I	A G	V X	Z X	S N	C N			
S0	1.00	0832		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
S	1.00	0839		-	-	X	X	X	X	X	X	X	X	X	-	-	-	-	-
S	1.00	0847		-	-	X	-	-	X	X	X	X	X	-	-	-	-	-	-
S	1.00	0910		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
S	1.00	0916		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	0925		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	0929		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	0936		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	0949		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	1008		-	-	X	X	X	X	X	X	X	X	X	-	-	-	-	-
ICV	1.00	1016		-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	X
ICB	1.00	1025		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
ICSA	1.00	1034		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
IC <sup>c</sup> AB	1.00	1042		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
C	1.00	1053		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
CCV	1.00	1102		-	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
CCV	1.00	1111		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
CCB	1.00	1119		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
PBW	1.00	1128		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
LCSW	1.00	1136		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T1WF	1.00	1145		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T1WFS	1.00	1153		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T1WFD	1.00	1202		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T1WFL	5.00	1210		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T1WDF	1.00	1219		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
1T5WF	1.00	1228		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
ZZZZZZ	1.00	1236		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1245		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1253		-	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
CCV	1.00	1302		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
CCB	1.00	1310		X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-
ZZZZZZ	1.00	1319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

14  
ANALYSIS RUN LOG

**Lab Name:** INDUSTRIAL AND ENVIRONMEN

## **Contract:**

La Code: IEA Case No.: 1364 226

SAS No.: \_\_\_\_\_ SDG No.: 08367

Instrument ID Number: 61T

## Method: P

Start Date: 08/28/97

End Date: 08/28/97

14 ANALYSIS RUN LOG

**Lab Name: INDUSTRIAL AND ENVIRONMEN**

## **Contract:**

Lab Code: IEA Case No.: 1364 226

SAS No.: \_\_\_\_\_ SDG No.: 08367

**Instrument ID Number: LACHAT**

**Method: CA**

**Start Date:** 08/27/97

End Date: 08/27/97

14  
ANALYSIS RUN LOG

Lab Name: INDUSTRIAL AND ENVIRONMEN

Contract: \_\_\_\_\_

I Code: IEA Case No.: 1364\_226

SAS No.: \_\_\_\_\_ SDG No.: 08367

Instrument ID Number: LACHAT

## Method: CA

Start Date: 08/27/97

End Date: 08/27/97

ICPMS Runlog  
Instrument-VG Plasma Quad

IM5X3302  
R12483

Computer File Name	082797J	Procedure Definition	200.8 Short
Analyst	F.Weber	Instrumental Analysis Date	8-27-97
Internal Standards	Se, In, Ho	Method Number	200.8
Collector	(PJ)	SC	Collector Mode

Sample ID#	Batch #	Initial Weight or Volume	Final Volume	Dilution Factor	Comments
\$0	N/A	N/A	N/A	N/A	$I_n = 469,000$
\$					# 35692
\$					# 35693
\$				✓	# 35694
Tune Check				2X	# 34577
ICU				1X	# 35695
ICU					# 35696
ICB	✓	✓	✓	✓	
PBW	08259703	100ml	50ml	2.5X	
LCSW					
970836701\$					1364-226
9708367010					
970836701					
970836702					
970836704					
970843901					2399-052
970844101					2399-054
970844401	✓	✓	✓	✓	2399-058
CCU	N/A	N/A	N/A	N/A	# 35692
CCU					# 35693
CCB	✓	✓	✓	✓	
<i>FW</i>					
<i>+21+</i>					

Secondary Review By: J. Neale Date: 9/3/97

## MASS CALIBRATION DATA

Wed Aug 27 1997

10:44:20

Actual Mass	Found DAC	Calculated DAC	Calculated Mass
7.01600E+0	1570	1559	7.06543E+0
9.01218E+0	1993	1995	9.00396E+0
5.89332E+1	12865	12890	5.83194E+1
1.14904E+2	25132	25109	1.15006E+2
1.39905E+2	30568	30569	1.39898E+2
2.08980E+2	45652	45659	2.08946E+2
2.38051E+2	52015	52012	2.38063E+2

New Mass calibration coeffs

$$y = a + bx + cx^2 + dx^3$$
$$-1.29806E-1 \quad 4.58307E-3 \quad -7.22687E-11 \quad 0.00000E+0$$

Regression coeff = 1.0000E+0

-----

Isotope Ratio Bias Factors

wed 27 Aug 1997

Bias factors for selected isotope ratios.

Experiment name : EPA

Analysis procedure : OXIDE

Introduction method : OXIDE

First sample started at : wed Aug 27 1997 10:51:10

Last sample started at : wed AUG 27 1997 10:51:10

Isotope Ratio	Bias Factor
Sr <sup>89</sup> / Sr <sup>88</sup> 138	±.00000
Sr <sup>88</sup> 154 / Sr <sup>88</sup> 138	±.00000

Procedure : OXIDE

Integrated Counts Per Second Values

Wed 27 Aug 1997

Statistics for Integrated CPS Determination.

Experiment name : EPA

Analysis procedure : OXIDE

Introduction method : OXIDE

First repeat started at :Wed Aug 27 1997 10:51:10

Last repeat started at :Wed Aug 27 1997 10:51:10

Sample name : OXIDE

Interference Equations : NONE

Element	Batt	Indium	Barium	BaU
Isotope	M* 69	In 115	Ba 138	M* 154
Detector	PC	PC	PC	PC
Run 1	7720.0	184962	132821	772.34

Sample : OXIDE

Isotope Ratio values

wed 27 Aug 1997

Statistics for Isotope Ratio determination.

Experiment name : EPA

Analysis procedure : OXIDE

Introduction method : OXIDE

First repeat started at : wed Aug 27 1997 10:51:10

Last repeat started at : wed Aug 27 1997 10:51:10

Sample name : OXIDE

Interference Equations : NONE

Ratio Ba-134 / Ba-138 = Ba-134 / Ba-138  
Run 1 0.05512 0.05511

Sample : OXIDE

Isotope Ratio Values

wed 27 Aug 1997

Isotope ratio summary for samples.

Experiment name : EPA

Analysis procedure : OXIDE

Introduction method : OXIDE

First sample started at :Wed Aug 27 1997 10:51:10

Last sample started at :Wed Aug 27 1997 10:51:10

Interference Equations :NONE

Sample Name OXIDE

Isotope Ratio	Value
Ba <sup>138</sup> / Ba 138	0.05812
Ba <sup>154</sup> / Ba 138	0.00581

Procedure : OXIDE

Multi-Element Calibration

Wed Aug 27 1997

Calibration graph coefficients for selected isotopes.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I

Introduction method : 200.8

First sample started at : Wed Aug 27 1997 11:03:36

Last sample started at : \*\*\*\*

Internal standards : Sc 45 In 115 H 165 (Interpolating)

Polynomial fit :  $y = a_0 + a_1 \cdot x + a_2 \cdot x^2$ 

Units of response : y = counts per second

Units of concentration : x = ppb

Element	Symbol	Mass	A <sub>0</sub>	A <sub>1</sub>	A <sub>2</sub>	Regression
Lithium	Li	6	-0.8	0.3	0.0	0.0
Beryllium	Be	8	21.023	2.037.6	0.0	1.00000
Titanium	Ti	48	191.07	2822.1	0.0	1.00000
Zirconium	Zr	51	420.40	3661.0	0.0	1.00000
Coronium	Cr	52	1.61.4	3686.4	0.0	1.00000
Chromium	Cr	53	131.73	421.36	0.0	1.00000
Nickel	Ni	58	630.63	3321.7	0.0	1.00000
Cobalt	Co	59	131.81	3303.6	0.0	1.00000
Nickel	Ni	60	33.353	3330.0	0.0	1.00000
Iron	Fe	54	1673.3	3376.6	-	1.00000
Copper	Cu	63	101.73	1721.8	0.0	1.00000
Lead	La	66	696.11	773.40	0.0	1.00000
Arsenic	As	75	63.639	439.69	0.0	1.00000
Selenium	Se	77	31.316	36.093	0.0	1.00000
Selenium	Se	78	31.512	43.839	0.0	1.00000
Krypton	Kr	84	0.0	0.0	0.0	0.0
Argonius	Ar	36	33.039	551.31	0.0	1.00000
Molybdenum	Mo	96	4.61.1	362.41	0.0	1.00000
Molybdenum	Mo	96	131.033	352.12	0.0	1.00000
Ruthenium	Ru	96	131.033	352.12	0.0	1.00000
Palladium	Pd	106	1.5.03	352.31	0.0	1.00000
Silver	Ag	107	71.513	1053.1	0.0	1.00000
Silver	Ag	108	31.514	3331.4	0.0	1.00000
Titanium	Ti	110	111.034	363.61	0.0	1.00000
Titanium	Ti	114	31.517	341.11	0.0	1.00000
Platinum	Pt	118	131.032	352.41	0.0	1.00000
Antimony	Sb	121	131.032	352.41	0.0	1.00000
Mercury	Hg	130	0.0	0.0	0.0	1.00000
Mercury	Hg	131	0.0	0.0	0.0	1.00000
Thallium	Tl	133	0.0	0.0	0.0	1.00000
Thallium	Tl	136	0.0	0.0	0.0	1.00000
Lead	Le	137	0.0	0.0	0.0	1.00000
Lead	Le	139	0.0	0.0	0.0	1.00000
Lead	Le	140	0.0	0.0	0.0	1.00000
Thorium	Th	152	173.514	3533.7	0.0	1.00000

082797I

Element	Symbol	Mass	a0	a1	a2	regression
Uranium	U	238	108.43	3263.9	0.0	1.00000

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 0827971  
 Introduction method : 200.8  
 Sample name : BLANK  
 First repeat started at : Wed Aug 27 1997 11:03:36  
 Last repeat started at : Wed Aug 27 1997 11:05:39

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Tungsten	Chromium	Chromium	Nickel
Isotope	Li 7	Be 9	Ti 49	W 61	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.00470	-0.36119	0.16365	-0.32339	-0.02340	0.00373
Run 2	0.0	0.00739	-0.06351	-0.11917	0.02040	0.02042	0.00353
Run 3	0.0	-0.01234	0.00439	-0.04631	0.00434	0.00433	-0.01135
Mean	0.0	0.00001	-0.00000	0.00000	0.00000	-0.00001	0.00000
Std Dev	0.0	0.01093	0.00415	0.14801	0.02332	0.02331	0.01073
SSD	0.0	114114	999439	51966000	1290760	340233	243622

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 65	Cu 65	Zn 65	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00377	0.00348	0.00348	0.00350	-0.00329	-0.03102
Run 2	0.00050	-0.00302	-0.00371	-0.01073	0.04353	-0.04552
Run 3	-0.00411	-0.00043	-0.00373	-0.02277	-0.01636	0.07386
Mean	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001
Std Dev	0.00036	0.00335	0.00361	0.00360	0.00793	0.00006
SSD	5340.5	93005	1056100	414400	417200	1131700

Element	Selenium	Selenious	Iodine	Mercurium	Molybdenum	Molybdenum
Isotope	Se 75	Se 82	Ir 191	Ir 191	Mo 96	Mo 96
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.00047	-0.00336	0.0	-0.01773	-0.00340	0.00002
Run 2	-0.10147	-0.10137	0.0	-0.01000	0.00546	-0.00230
Run 3	0.10534	0.10743	0.0	0.01129	-0.00306	-0.00376
Mean	0.00000	0.00000	0.0	0.00000	0.00001	-0.00000
Std Dev	0.10402	0.10473	0.0	0.01177	0.00406	0.00700
SSD	4333300	317300	0.0	347707	330966	573887

Element	Authenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ag 102	Pd 103	Ag 107	Ag 107	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00430	-0.00449	0.00334	0.00330	-0.00449	-0.00300
Run 2	-0.00033	0.00361	-0.00154	-0.00103	0.00056	-0.01266
Run 3	0.00133	-0.00011	-0.00171	-0.00049	0.00058	0.02064
Mean	0.00001	0.00001	0.00000	0.00000	0.00000	-0.00001
Std Dev	0.00003	0.00033	0.00033	0.00164	0.00007	0.01303
SSD	330.5	113532	555369	303337	172375	307022

Element	Rib	Actinony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

BLANK

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00452	-0.01386	0.00714	0.04578	-0.00040	0.00005
Run 2	-0.00330	0.00639	0.09189	0.04367	0.00387	0.00027
Run 3	0.00103	0.00691	0.04322	0.04384	-0.00346	-0.00029
Mean	0.00002	0.00001	0.06542	0.04843	0.00000	0.00001
Std Dev	0.00309	0.01202	0.02462	0.00230	0.00368	0.00028
SSD	31637	95215	37.633	4.7431	121452	2994.5

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tn 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.01667	0.02336	0.00376	-0.00200	0.00448
Run 2	0.00368	-0.01601	-0.00335	-0.00360	-0.00377
Run 3	-0.02034	-0.00733	-0.00338	0.00761	-0.00069
Mean	0.00000	0.00000	0.00001	0.00001	0.00001
Std Dev	0.01878	0.02069	0.00764	0.00683	0.00417
SSD	722704	772309	125553	107272	48878

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	98.897	98.992	99.200
Run 2	99.786	100.38	100.57
Run 3	101.36	100.63	100.23
Mean	100.000	100.000	100.000
Std Dev	1.3634	0.88171	0.71283

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : ZUO.8  
 Sample name : CAL4  
 First repeat started at : Wed Aug 27 1997 ii:10:58  
 Last repeat started at : Wed Aug 27 1997 ii:13:01

Interference Equations : ZUO.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 7	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 55
Detector	PC	PC	PC	PC	PC	PC	PC
Zaa 1	0.0	100.32	-0.00334	100.09	99.993	99.996	101.15
Zaa 2	0.0	99.980	-0.00310	99.996	99.993	99.991	99.985
Zaa 3	0.0	99.997	-0.00197	100.09	100.32	100.32	99.990
Mean	0.0	100.000	-0.00337	100.000	100.000	100.000	100.000
Std Dev	0.0	0.31336	0.91247	0.42091	0.29053	0.27947	1.0294
RSD	0.0	0.31336	0.31336	0.42091	0.29053	0.27947	1.0294

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 60	Ni 60	Zn 64	Cu 63	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Zaa 1	101.25	100.87	100.31	99.793	100.25	99.398
Zaa 2	99.152	99.263	99.924	99.234	100.36	99.913
Zaa 3	99.597	100.12	99.761	100.97	99.482	100.99
Mean	100.000	100.000	100.000	100.000	100.000	100.000
Std Dev	1.1036	0.67734	0.33937	0.66810	0.44333	0.36333
RSD	1.1036	0.67734	0.33937	0.66810	0.44333	0.36333

Element	Selenium	Selenium	Iridium	Zirconium	Molybdenum	Molybdenum
Isotope	Se 75	Se 75	Ir 91	Cr 90	Mo 92	Mo 92
Detector	PC	PC	PC	PC	PC	PC
Zaa 1	99.830	99.170	0.0	-0.0.396	-0.00396	0.00397
Zaa 2	100.50	100.55	0.0	-0.00707	-0.00326	0.00366
Zaa 3	101.37	101.37	0.0	0.00100	0.00100	0.00100
Mean	100.000	100.000	0.0	-0.00331	-0.00173	0.00181
Std Dev	1.5393	1.6301	0.0	0.0.000	0.00161	0.00161
RSD	1.5393	1.6301	0.0	0.0.000	0.00161	0.00161

Element	Antimony	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Sb 113	Pd 103	Ag 107	Ag 107	Cd 109	Cd 109
Detector	PC	PC	PC	PC	PC	PC
Zaa 1	0.00704	0.02632	0.3260	10.002	98.807	100.19
Zaa 2	0.02633	0.03002	0.3249	0.3234	99.310	100.30
Zaa 3	0.01644	0.09934	0.3193	0.008	101.16	99.593
Mean	0.01481	0.03747	0.3180	10.000	100.000	100.000
Std Dev	0.00710	0.02800	0.37712	0.06677	1.609	0.31691
RSD	0.00710	0.02800	0.37712	0.06677	1.609	0.31691

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.00428	-0.00255	0.04128	0.07682	98.705	99.385
Run 2	-0.00469	0.00782	0.03574	0.06790	100.40	100.63
Run 3	-0.00603	-0.00228	0.02376	0.06070	100.83	99.560
Mean	-0.00217	0.00099	0.03359	0.06914	100.000	100.000
Std Dev	0.00063	0.00031	0.00096	0.00912	1.0905	0.62500
%SD	259.45	594.19	26.661	13.190	1.0905	0.62500

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tl 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	99.712	99.688	99.124	-0.00940	-0.00879
Run 2	100.34	99.965	100.40	-0.01771	-0.00916
Run 3	99.944	101.35	100.48	-0.02946	-0.00800
Mean	100.000	100.000	100.000	-0.01887	-0.00865
Std Dev	0.31969	1.3302	0.75994	0.01006	0.00059
%SD	0.31969	1.3302	0.75994	53.288	6.8641

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	98.060	99.560	97.952
Run 2	98.837	93.605	96.977
Run 3	97.970	98.707	97.254
Mean	98.289	98.958	97.394
Std Dev	0.47680	0.52458	0.50228

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 0827971  
 Introduction method : 200.8  
 Sample name : ICPMS3  
 First repeat started at : Wed Aug 27 1997 11:18:20  
 Last repeat started at : Wed Aug 27 1997 11:20:24

## Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 7	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 63
Detector	PC	PC	PC	PC	PC	PC	PC
Znn 1	0.0	0.13633	0.01770	0.20134	0.31559	0.31574	0.10344
Znn 2	0.0	0.06073	-0.30114	0.27363	0.31441	0.24454	0.11023
Znn 3	0.0	0.06314	0.00933	0.35637	0.26308	0.26317	0.08002
Mean	0.0	0.09343	0.00753	0.30274	0.37436	0.27448	0.03378
Std Dev	0.0	0.03833	0.00939	0.05749	0.03591	0.03693	0.01592
ZSD	0.0	41.017	125.34	18.390	13.632	13.434	16.113

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	In 61	Cu 63	In 61	As 75
Detector	PC	PC	PC	PC	PC	PC
Znn 1	0.13371	0.14193	0.10813	0.19031	0.10258	0.24600
Znn 2	0.09201	0.10423	0.05833	0.16137	0.05610	0.11715
Znn 3	0.05767	0.06703	0.06601	0.13398	0.11433	0.11234
Mean	0.09445	0.10462	0.07453	0.16373	0.09763	0.15870
Std Dev	0.03802	0.03718	0.03337	0.02510	0.01900	0.07564
ZSD	40.312	35.543	33.033	15.387	10.314	47.552

Element	Selenium	Selenium	Iridium	Dysprosium	Holmium	Molybdenum
Isotope	Se 75	Se 82	Ir 191	Pr 149	Ho 165	Mo 95
Detector	PC	PC	PC	PC	PC	PC
Znn 1	0.30733	0.30937	0.0	1.2333	0.04171	-0.30993
Znn 2	0.04134	0.04213	0.0	1.1513	0.06167	-0.01832
Znn 3	-0.16133	-0.16133	0.0	1.1531	0.04131	-0.30203
Mean	0.03240	0.03334	0.0	1.2133	0.04031	-0.30376
Std Dev	0.36762	0.36814	0.0	0.05167	0.03334	0.24163
ZSD	389.30	385.73	0.0	4.2733	35.532	35.228

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 102	Pd 103	Ag 107	Ag 109	Cd 108	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Znn 1	33.334	33.765	33.1133	0.06231	0.06365	-0.04134
Znn 2	33.313	100.22	33.0631	0.06052	0.06792	-0.06315
Znn 3	100.10	33.263	33.1433	0.04713	0.06753	-0.06357
Mean	100.000	100.000	33.03240	0.06173	0.06732	-0.06339
Std Dev	0.03060	0.21333	0.03196	0.02103	0.00177	0.03168
ZSD	0.03060	0.21333	33.433	34.393	0.37333	43.343

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

ICPMS3

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	100.71	99.970	0.05331	0.05123	0.20517	0.24039
Run 2	98.597	99.988	0.08789	0.02072	0.16530	0.17344
Run 3	100.70	100.04	0.06760	0.08950	0.12391	0.11363
Mean	100.000	100.000	0.06939	0.05248	0.16566	0.17589
Std Dev	1.2148	0.03743	0.01736	0.03241	0.03563	0.06392
SE	1.2148	0.03743	24.942	61.748	23.922	36.112

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tn 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.15991	0.40806	0.21568	98.500	100.16
Run 2	0.10963	0.32850	0.16646	99.000	101.23
Run 3	0.10941	0.40104	0.16889	102.44	98.608
Mean	0.12532	0.37920	0.17968	100.000	100.000
Std Dev	0.02909	0.04405	0.03155	2.1315	1.3195
SE	23.030	11.616	17.537	2.1315	1.3195

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 43	In 115	Ho 165
Detector	PC	PC	PC
Run 1	99.036	97.568	97.511
Run 2	100.16	98.742	98.620
Run 3	99.940	99.045	98.261
Mean	99.713	98.452	98.131
Std Dev	0.59710	0.77392	0.56561

## Multi-Element Concentrations Statistics for Concentration

Wed Aug 27 1997

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 0827971  
Introduction method : 200.8  
Sample name : MOTIZR  
First repeat started at : Wed Aug 27 1997 11:25:47  
Last repeat started at : Wed Aug 27 1997 11:27:51

**Interference Equations** : 200.8  
**Internal standards** : Sc 45 In 115 Ho 165 (Interpolating)  
**Dilution Factor** : 1.00000 Concentration units : ppb

Element	Silicon	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Tl-45	V-51	Cr-53	Cr-53	Mn-55
Detector	PC	PC	PC	PC	PC	PC	PC
Zeta 1	0.0	0.04133	100.34	-0.10220	0.04145	0.04133	0.02108
Zeta 2	0.0	0.04401	33.333	0.09787	0.08044	0.08042	-0.01957
Zeta 3	0.0	0.03623	100.31	0.11752	0.01597	0.01595	-0.01295
Mean	0.0	0.04075	100.000	0.03760	0.03930	0.03926	-0.00385
Std Dev	0.0	0.00403	0.35963	0.12143	0.02231	0.02231	0.02155
Zeta	0.0	0.37117	0.35963	323.55	55.765	55.333	561.31

Element	Cobalt	Nickel	Zinc	Copper	- Zinc	Arsenic
Isotope	Co-59	Ni-60	Zn-64	Co-60	Zn-66	As-75
Detector	PC	PC	PC	PC	PC	PC
Zaa 1	0.03463	0.07433	0.51644	0.06509	0.23045	-0.08306
Zaa 2	0.04642	0.06516	0.50457	0.06794	0.06430	-0.01304
Zaa 3	0.02361	0.06315	0.50114	0.05870	0.04507	-0.05733
Mean	0.03470	0.06632	0.50332	0.06324	0.11019	-0.05224
Std Dev	0.01142	0.00803	0.00563	0.00334	0.00504	0.03175
ZSI	33.523	32.721	3.327	3.108	27.169	33.523

Element	Selenium	Selenium	Iridium	Zirconium	Holmium	Molybdenum
Isotope	Se-75	Se-83	Ir-191	Ir-191	Ho-165	Mo-96
Detecto	PC	PC	PC	PC	PC	PC
Run 1	-0.05275	-0.05193	0.0	33.093	33.093	100.00
Run 2	-0.10584	-0.10583	0.0	33.093	33.093	100.00
Run 3	-0.05219	-0.05137	0.0	33.093	33.093	100.00
Mean	-0.05516	-0.05500	0.0	33.093	33.093	100.000
Std Dev	0.10701	0.10663	0.0	0.10701	0.10663	0.10663
%SD	199.16	197.37	0.0	0.10701	0.10663	0.10663

Element	Anthenium	Palladium	Silver	Silver	Tin	Cadmium
Isotope	Ag-36	Pd-108	Ag-107	Ag-109	Sn-113	Cd-114
Detector	PC	PC	Si	Si	Si	PC
Run 1	0.13234	0.17366	0.70034	1.6146	0.28351	0.13736
Run 2	0.09413	0.13902	0.69739	1.5911	0.16522	0.13772
Run 3	0.07490	0.093601	0.68668	1.5597	0.16677	0.16331
Mean	0.13017	0.13796	0.69700	1.5917	0.16669	0.13244
Std Dev	0.06338	0.04143	0.03666	0.02231	0.01103	0.01658
RSD	47.3%	30.9%	5.3%	1.4%	6.5%	3.8%

**Element**      **Tin**      **Antimony**      **Mercury**      **Mercury**      **Phallus**      **Phallus**

4071ZK

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run i	0.72879	0.15499	47.880	49.000	0.65318	0.03042
Run 2	0.42731	0.11410	51.259	50.218	0.56510	0.03155
Run 3	0.48207	0.09445	50.861	50.181	0.58541	0.03311
Mean	0.54666	0.12113	50.000	50.000	0.60123	0.03503
Std Dev	0.16001	0.03088	1.8468	0.34644	0.04613	0.01034
%SD	29.412	25.486	3.6936	0.69288	7.6719	13.780

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Th 232	U 238
Detector	PC	PC	PC	PC	PC
Run i	0.00001	0.02766	0.01513	2.7459	0.12559
Run 2	0.02330	-0.00873	0.00748	1.2102	0.07039
Run 3	0.01657	0.00834	0.00632	0.71928	0.04994
Mean	0.01346	0.00909	0.00981	1.0585	0.08198
Std Dev	0.00895	0.01821	0.00462	1.0573	0.03913
%SD	57.887	200.30	47.060	67.839	47.740

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run i	99.314	101.10	100.98
Run 2	100.20	100.49	99.336
Run 3	100.18	100.43	99.300
Mean	99.897	100.57	99.872
Std Dev	0.50496	0.37255	0.96005

Multi-Element Concentrations Wed Aug 27 1997

Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 0827971  
 Introduction method : 200.8  
 Sample name : Tune Check  
 First repeat started at : Wed Aug 27 1997 11:33:11  
 Last repeat started at : Wed Aug 27 1997 11:36:20

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Indium	Tanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	In 115	V 51	Cr 52	Cr 53	Ni 59
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	37.303	0.44230	0.55030	0.51319	0.50926	36.117
Run 2	0.0	39.356	0.38137	0.39231	0.43505	0.43118	35.084
Run 3	0.0	39.241	0.38467	0.37355	0.40034	0.39711	32.534
Run 4	0.0	39.314	0.36394	0.41027	0.36019	0.37637	32.129
Mean	0.0	39.303	0.38420	0.38737	0.41719	0.44583	33.481
Std Dev	0.0	1.0033	0.07463	0.15054	0.06666	0.06627	1.3643
RSD	0.0	1.0123	35.323	41.352	34.803	34.933	1.4681

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	In 115	Ca 45	In 115	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	32.141	33.330	3.1033	0.64370	1.7153	0.26342
Run 2	31.866	33.341	3.2033	0.74545	1.6806	0.01395
Run 3	30.100	32.410	3.4033	0.63471	1.7734	0.13132
Run 4	30.344	32.530	3.1033	0.66645	1.7734	0.23116
Mean	31.023	32.337	3.1233	0.68666	1.7273	0.17054
Std Dev	0.33135	0.57072	0.15010	0.04633	0.06773	0.12356
RSD	1.0337	0.61337	0.1347	0.06333	0.03933	72.432

Element	Selenium	Selenium	Iodine	Diboron	Molybdenum	Molybdenum
Isotope	Se 75	Se 82	Ir 191	Br 80	Mo 96	Mo 95
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.04533	0.51503	0.0	0.11100	0.5.461	0.46317
Run 2	0.05343	0.00313	0.0	0.05504	0.05511	0.45563
Run 3	0.03103	-0.00200	0.0	0.05507	0.05674	0.51763
Run 4	0.43366	0.37130	0.0	0.14500	0.17066	0.36143
Mean	0.26563	0.05513	0.0	0.06500	0.06176	0.37327
Std Dev	0.13330	0.13300	0.0	0.03500	0.03626	0.12037
RSD	105.13	143.37	0.0	13.102	55.620	32.345

Element	Ruthenium	Palladium	Silver	Silver	Sodium	Sodium
Isotope	Ru 82	Pd 103	Ag 107	Ag 109	Na 22	Ca 44
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.11330	0.13370	0.03366	0.04620	0.03203	0.03163
Run 2	0.15333	0.03333	0.04303	0.07503	0.16404	0.03763
Run 3	0.07374	0.11333	0.03333	0.04503	0.03323	0.03346

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.12368	0.07335	0.04378	0.04228	0.02019	0.06703
Run 2	0.11953	0.07250	0.03828	0.03380	0.09002	0.03501
Std Dev	0.03270	0.02668	0.00456	0.01508	0.05890	0.02330
XSD	27.357	24.877	11.906	28.038	65.430	42.360

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.33688	0.07056	1.7581	2.1909	0.08246	0.06806
Run 2	0.22574	0.15015	1.5081	1.8414	0.11578	0.07513
Run 3	0.39092	0.08538	1.5324	1.2855	0.08591	0.08467
Run 4	0.23813	0.04802	1.2684	1.2160	0.07821	0.07863
Mean	0.27292	0.08853	1.5168	1.6334	0.09059	0.07662
Std Dev	0.05115	0.04386	0.20019	0.46523	0.01709	0.00634
XSD	18.743	49.542	13.199	28.482	18.859	9.0544

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tl 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	105.71	94.042	97.894	0.24400	101.19
Run 2	105.25	92.040	97.293	0.18729	101.68
Run 3	106.03	92.055	97.549	0.18495	101.87
Run 4	106.60	91.206	96.547	0.14952	103.04
Mean	106.40	92.336	97.321	0.18394	101.94
Std Dev	1.2278	1.2048	0.57146	0.04337	0.78213
XSD	1.1539	1.3048	0.58719	23.578	0.76720

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Inium	Hoium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	50.057	74.493	50.266
Run 2	50.748	75.741	50.557
Run 3	51.742	75.300	50.695
Run 4	52.135	76.668	51.911
Mean	51.170	75.556	50.857
Std Dev	0.94422	0.91434	0.72436

Internal Standard Drift outside drift window.

Failed isotopes = Sc 45 Ho 165

Specified action is to continue with procedure.

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 0827971  
Introduction method : 200.8  
Sample name : ICV  
First repeat started at : Wed Aug 27 1997 11:41:40  
Last repeat started at : Wed Aug 27 1997 11:43:45

## Interference Equations : 200.8

**Internal standards** : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Titanium	Beryllium	Titanium	Titanium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Si-28	V-51	Cr-52	Cr-53	Ni-58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.9	3.3446	141.31	35.160	19.159	19.159	75.141
Run 2	0.0	3.7187	141.33	35.161	19.154	19.150	75.329
Run 3	0.0	3.3435	141.33	37.556	19.129	19.119	75.207
Mean	0.9	3.7083	141.33	37.556	19.174	19.170	75.326
Std Dev	0.0	0.15244	0.55103	0.26053	0.20933	0.21064	0.47423
RSS	0.9	1.5701	0.33881	0.26132	0.20863	0.21037	0.422716

Element	Cobalt	Nickel	Zinc	Copper	- Zinc	Antimony
Isotope	Co-59	Ni-60	Zn-64	Cu-65	Zn-65	As-75
Detector	PC	PC	PC	PC	PC	PC
Zinc 1	55.636	76.631	42.637	45.632	40.635	12.631
Zinc 2	55.635	76.630	42.636	45.631	40.634	12.630
Zinc 3	54.677	76.617	41.633	45.674	40.706	12.636
Gas	55.630	76.633	41.638	45.633	40.633	12.637
Co Dev	0.66616	0.23715	0.33717	0.71020	0.10684	0.18097
ASD	0.33325	0.14825	0.23323	0.65025	0.09328	0.03555

Element	Selenium	Selenium	Iron	Manganese	Molybdenum	Molybdenum
Isotope	Se-75	Se-82	Fe-54	Fe-57	Mo-92	Mo-96
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.3454	3.3452	3.0	0.61718	106.54	112.82
Run 2	10.105	10.104	10.1	0.48771	101.17	110.17
Run 3	10.105	10.093	10.1	0.48806	101.27	109.34
Mean	3.3703	3.3701	3.0	0.61704	106.57	112.85
Std Dev	0.00003	0.00003	0.0	0.00004	0.2000	0.00007
RSD	0.001%	0.001%	0.0	0.001%	0.19%	0.001%

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	192 Ru	PG 163	Ag 110	Ag 103	CD 110	CD 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.00302	0.00300	19.000	19.000	0.00701	0.00000
Run 2	0.00307	0.00304	19.000	19.000	0.00100	0.00000
Run 3	0.00304	0.00307	19.000	19.000	0.00105	0.00000
Mean	0.00307	0.00303	19.000	19.000	0.00102	0.00000
Std Dev	0.00103	0.00103	0.00000	0.00000	0.00001	0.00000
zSD	12.004	10.701	0.50000	0.50000	1.40000	0.40000

**Element**      **File**      **Access**      **Records**      **Security**      **Sharing**      **Details**

CV

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	200.10	108.04	0.31038	0.26494	18.989	18.919
Run 2	199.30	112.55	0.29796	0.27042	19.006	19.030
Run 3	199.30	113.41	0.22708	0.22230	19.369	19.152
Mean	199.77	111.33	0.26514	0.28589	19.122	19.034
Std Dev	0.41329	2.8849	0.04211	0.03165	0.21457	0.11675
$\bar{x}_{\text{SD}}$	0.20789	2.5912	15.882	11.071	1.1221	0.61341

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tl 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	5.9972	5.4821	5.6680	0.31849	0.10381
Run 2	6.1605	5.4428	5.7960	0.22450	0.08535
Run 3	6.0366	5.6809	5.7548	0.21889	0.08196
Mean	6.0648	5.5353	5.7396	0.25396	0.09104
Std Dev	0.05518	0.12762	0.06538	0.05595	0.01290
$\bar{x}_{\text{SD}}$	1.4046	2.3055	1.1390	22.032	14.172

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Inium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	92.358	93.494	97.701
Run 2	91.910	93.821	97.401
Run 3	91.900	93.991	97.928
Mean	92.256	94.435	97.677
Std Dev	0.00806	1.3574	0.26438

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : ICV Uranium  
 First repeat started at : Wed Aug 27 1997 11:49:07  
 Last repeat started at : Wed Aug 27 1997 11:51:11

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Tantalum	Chromium	Chromite	Nickel
Isotope	Li 7	Be 9	Ti 48	Ta 181	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.00300	0.06000	0.00947	-0.00069	-0.00111	1.3333
Run 2	0.0	0.00326	0.06403	-0.00922	0.00181	0.00166	1.2252
Run 3	0.0	0.00300	0.06107	0.00937	-0.00147	-0.00171	1.3633
Mean	0.0	0.00317	0.06113	0.00937	-0.00019	-0.00041	1.2532
Std Dev	0.0	0.001537	0.02518	0.00742	0.00166	0.00155	0.03041
SDP	0.0	30.331	18.447	101.66	11.143	7986.3	2.4143

Element	Cobalt	Nickel	Zinc	Copper	Lead	Arsenic
Isotope	Co 59	Ni 60	Zn 65	Co 59	La 65	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.13332	1.3037	4.1232	0.00461	4.3460	-0.23332
Run 2	0.13125	1.3033	4.0631	0.01200	4.3037	-0.09332
Run 3	0.13330	1.2829	4.2637	0.00161	4.2667	0.07336
Mean	0.13203	1.3133	4.1337	0.01034	4.3116	0.12571
Std Dev	0.00714	0.04833	0.07936	0.01392	0.06933	0.43233
SDP	5.4677	3.6833	1.8537	93.933	11.143	361.93

Element	Selenium	Selenium	Iridium	Diboron	Polyboron	Polyboreum
Isotope	Se 75	Se 82	Ir 191	Br 35	Br 35	Br 35
Detector	PC	PC	PC	PC	PC	PC
Run 1	49.020	49.354	0.1	0.00014	0.37693	0.47463
Run 2	49.034	49.006	0.1	0.00011	0.39341	0.13410
Run 3	49.033	49.355	0.1	0.00017	0.37123	0.31334
Mean	49.013	49.176	0.1	0.00011	0.38332	0.29463
Std Dev	0.12313	0.13637	0.1	0.00013	0.09056	0.15647
SDP	1.5812	1.5777	0.1	50.043	41.673	53.225

Element	Antimony	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Sb 125	Pd 108	Ag 107	Ag 109	Ag 107	Ag 108
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00380	0.01033	0.00003	0.00013	0.07765	0.00732
Run 2	0.00317	0.00537	0.00001	0.00004	0.05132	0.00515
Run 3	0.00331	0.00313	0.00041	0.00007	0.07773	-0.00317
Mean	0.00323	0.00534	0.00002	0.00004	0.05449	0.00548
Std Dev	0.00031	0.00111	0.00043	0.00003	0.00610	0.00639
SDP	45.755	74.091	10.375	33.426	66.243	144.63

Element	Ra	Antimony	Sterry	Mercury	Thallium	Thallium
---------	----	----------	--------	---------	----------	----------

ICV Uranium

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.4899	2.5529	0.23849	0.26854	0.065385	0.06365
Run 2	1.0428	1.8468	0.18741	0.20908	0.04707	0.03905
Run 3	0.84123	1.5410	0.22134	0.21419	0.04983	0.04799
Mean	1.1246	1.9803	0.21375	0.24947	0.05409	0.05590
Std Dev	0.33200	0.51897	0.02348	0.03053	0.00987	0.00783
zSD	29.521	26.207	10.983	12.261	18.245	14.013

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tl 233	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.00811	-0.01290	0.00320	91.865	104.25
Run 2	-0.00437	-0.01683	0.00434	100.22	100.56
Run 3	0.02305	-0.00233	0.01573	99.800	110.19
Mean	0.00893	-0.01068	0.00776	97.295	107.00
Std Dev	0.01373	0.00750	0.00694	4.7071	2.9926
zSD	153.74	70.177	89.388	4.8380	2.7968

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	92.983	97.800	100.62
Run 2	94.608	99.099	101.70
Run 3	94.043	99.897	101.77
Mean	93.880	98.932	101.37
Std Dev	0.82371	1.0585	0.64596

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : ICB  
 First repeat started at : Wed Aug 27 1997 11:56:32  
 Last repeat started at : Wed Aug 27 1997 11:58:37

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Sodium	Beryllium	Manganese	Vanadium	Chromium	Cadmium	Nickel
Isotope	Li 7	Be 9	Fe 56	V 51	Cr 52	Cr 53	Ni 65
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.02337	0.14191	0.13547	0.00163	0.00139	0.00449
Run 2	0.0	0.01541	0.13974	0.08835	-0.01702	-0.01733	0.03834
Run 3	0.0	0.01624	0.05937	0.00945	-0.04071	-0.04095	0.01981
Mean	0.0	0.01531	0.11837	0.04882	-0.01870	-0.01839	0.04983
Std Dev	0.0	0.000432	0.02662	0.07534	0.00122	0.02118	0.02245
SDS	0.0	23.373	31.303	157.30	110.46	111.49	54.316

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 69	Zn 64	Cu 63	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00330	0.00331	0.00332	0.00716	0.00715	-0.10330
Run 2	0.00333	0.00337	0.00454	-0.01482	0.00365	-0.01463
Run 3	0.00331	0.00314	-0.00377	-0.02564	0.00319	0.17332
Mean	0.00333	0.00331	0.00331	-0.01467	0.00333	0.01333
Std Dev	0.00032	0.00034	0.00139	0.00003	0.00007	0.14033
SDS	33.413	43.513	107.13	434.33	161.33	181.33

Element	Selenium	Selenium	Iridium	Manganese	Tellurium	Holmium
Isotope	Se 75	Se 75	Ir 192	Fe 56	Te 130	Ho 165
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.16733	-0.13733	0.0	0.00014	0.00033	0.13333
Run 2	-0.13733	-0.11733	0.0	0.00074	0.00033	0.07333
Run 3	0.13333	0.13733	0.0	0.00011	0.00033	0.13333
Mean	-0.13433	-0.11733	0.0	0.00014	0.00033	0.10333
Std Dev	0.13033	0.13033	0.0	0.00077	0.00033	0.03333
SDS	373.13	347.33	0.0	43.333	14.333	34.333

Element	Indium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	In 115	Pd 103	Ag 107	Ag 107	Cd 111	Cd 111
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00010	0.00033	0.00033	0.00033	-0.00146	0.00449
Run 2	0.00033	0.00173	0.00173	0.00033	-0.00133	0.00396
Run 3	0.00033	0.00127	0.00033	0.00033	0.00033	0.00033
Mean	0.00033	0.00133	0.00133	0.00033	0.00033	0.00033
Std Dev	0.00163	0.00044	0.00033	0.00033	0.00072	0.01333
SDS	33.021	23.503	33.103	43.333	307.57	52.533

Element	Ra	Antimony	Mercury	Mercury	Tellurium	Tellurium
---------	----	----------	---------	---------	-----------	-----------

ICB

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run i	0.44695	0.70660	0.20431	0.19735	0.04213	0.01626
Run z	0.41831	0.57744	0.16486	0.14781	0.03596	0.02714
Run j	0.30422	0.64787	0.16792	0.17983	0.02957	0.03827
Mean	0.38982	0.64397	0.17903	0.17499	0.03589	0.02722
Std Dev	0.07551	0.08467	0.02195	0.02512	0.00628	0.01101
$\bar{x}SD$	19.370	10.042	12.253	14.356	17.493	40.434

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Rh 232	U 238
Detector	PC	PC	PC	PC	PC
Run i	0.03151	-0.00307	0.02053	3.9809	0.16636
Run z	0.03500	0.03103	0.03108	2.3332	0.12679
Run j	0.00618	-0.01436	0.00483	1.5698	0.08466
Mean	0.02423	0.00455	0.01881	2.6480	0.12613
Std Dev	0.01573	0.02367	0.01321	1.2236	0.04115
$\bar{x}SD$	64.910	519.88	70.205	46.284	32.626

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Inadium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run i	98.013	99.142	98.949
Run z	93.720	101.00	99.855
Run j	93.557	99.543	99.751
Mean	93.097	99.895	99.518
Std Dev	0.94224	0.97772	0.49555

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 082797I  
Introduction method : ZOO.8  
Sample name : PBW 08259703I 2.5K  
First repeat started at : Wed Aug 27 1997 12:03:57  
Last repeat started at : Wed Aug 27 1997 12:06:01

## Interference Equations : 200.8

**Internal standards** : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Ch�romite	Nickel
Isotope	Li-6	Be-9	Ti-46	V-51	Cr-52	Cr-53	Ni-63
Detector	PC	PC	PC	PC	PC	PC	PC
Mean 1	0.3	0.01331	0.10000	0.51131	0.01332	0.31330	0.33330
Mean 2	0.0	0.02333	0.10439	-0.28439	0.03441	0.33443	0.31450
Mean 3	0.0	0.00500	0.00000	0.70694	0.00141	0.31109	0.11790
Mean	0.0	0.01331	0.09716	0.41131	0.01333	0.31149	0.30552
Std Dev	0.0	0.000971	0.01466	0.60653	0.01165	0.01155	0.02235
RSD	0.0	22.512	17.115	14.714	1.5132	1.6249	11.129

Element	Cobalt	Nickel	Zinc	Copper	-	Silver	Arsenic
Isotope	Co-59	Ni-60	Zn-64	Cu-65	Zn-66		As-75
Detector	PC	PC	PC	PC	PC		PC
Line 1	0.02631	0.19493	1.0798	0.17772	1.3516		-0.04202
Line 2	0.04600	0.17073	1.0337	0.18170	1.4541		0.11679
Line 3	0.03633	0.18393	1.1293	0.18934	1.4310		0.06691
Line 4	0.03271	0.19473	1.0599	0.19223	1.4106		0.04856
Std Dev	0.01155	0.01243	0.05594	0.00112	0.05594		0.11663
RSD	35.3%	6.2%	5.1%	15.1%	1.5%		33.8%

Element	Selenium	Selenium	Iodine	Circium	Molybdenum	Molybdenum
Isotope	Se-75	Se-82	Ir-192	Ir-90	Mo-95	Mo-96
Detector	PC	PC	PC	PC	PC	PC
Ins. 1	-0.07000	-0.07000	0.0	0.00000	0.00000	0.00000
Ins. 2	-0.16000	-0.17000	0.0	0.00000	0.00000	0.00000
Ins. 3	0.06000	0.06000	0.0	0.00000	0.00000	0.00000
Mean	-0.06023	-0.06076	0.0	0.04955	0.00000	0.00000
Std. Dev.	0.01912	0.01967	0.0	0.03004	0.00000	0.00000
RSD%	32.3%	32.2%	0.0	60.4%	0.0%	0.0%

Element	Antimony	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	103 Sb	Pa 103	Ag 107	Ag 109	103 Cd	103 Cd
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.01363	0.01713	0.17066	0.21771	0.00666	0.00673
Run 2	-0.00663	0.01676	0.16651	0.19103	0.00604	0.00677
Run 3	0.00613	0.00234	0.16651	0.19103	0.01361	0.01359
Mean	0.00363	0.00266	0.16651	0.19103	0.00973	0.01046
Std Dev	0.00634	0.01714	0.16650	0.19103	0.00626	0.01759
RSD	18.6%	52.8%	11.2%	10.0%	16.4%	13.5%

**Element** **Id** **Address** **Name** **Description** **Type** **Value** **Unit**

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.27500	0.44147	0.16338	0.15243	0.04703	0.03450
Run 2	0.24687	0.42382	0.17844	0.14965	0.03280	0.03047
Run 3	0.29049	0.37433	0.11782	0.14014	0.06328	0.03378
Mean	0.27078	0.41321	0.15328	0.14740	0.04771	0.03291
Std Dev	0.02211	0.03481	0.03159	0.00645	0.01525	0.00215
%SD	8.1664	8.4235	20.613	4.3725	31.568	6.5305

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Th 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.11622	0.03223	0.10153	0.31601	0.06375
Run 2	0.11261	0.05933	0.09093	0.73857	0.05459
Run 3	0.11096	0.06638	0.09721	0.65129	0.05441
Mean	0.11326	0.06935	0.09656	0.70862	0.05758
Std Dev	0.00269	0.01160	0.00533	0.13489	0.00534
%SD	2.3741	16.819	5.5180	17.550	9.2783

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	88.603	93.160	93.337
Run 2	90.299	93.860	97.110
Run 3	90.428	94.048	93.598
Mean	89.777	93.690	93.015
Std Dev	1.0169	0.46807	0.95731

## Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : LCSW 08259703I 2.5X  
 first repeat started at : Wed Aug 27 1997 12:11:24  
 Last repeat started at : Wed Aug 27 1997 12:13:37

## Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.000000 Concentration units : ppb

Element	Cobalt	Beryllium	Iron	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Co 59	Be 9	Fe 56	Ti 48	V 51	Cr 52	Cr 53	Ni 63
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	53.451	33.234	33.343	33.303	73.351	73.373	
Run 2	0.0	51.451	33.231	33.333	33.303	73.436	73.510	
Run 3	0.0	73.303	33.067	33.453	33.703	73.712	73.960	
Mean	0.0	50.965	33.344	33.333	33.304	73.363	73.381	
Std Dev	0.0	1.3473	0.38433	0.21726	0.39357	0.38250	0.33773	
RSD	0.0	1.3110	0.41003	0.38345	0.46326	0.47810	0.36314	

Element	Cobalt	Nickel	Iron	Copper	-	Iron	Arsenic
Isotope	Co 59	Ni 63	Fe 56	Co 59	Fe 56	As 75	
Detector	PC	PC	PC	PC	PC	PC	
Run 1	73.060	73.553	33.030	73.536	33.034	50.333	
Run 2	73.377	73.237	33.033	73.421	33.157	50.340	
Run 3	73.358	73.533	33.131	73.196	33.365	51.460	
Mean	73.363	73.532	33.106	73.312	33.311	50.360	
Std Dev	0.00132	1.5091	0.0014	0.32404	1.0113	0.32137	
RSD	0.0026	1.3216	0.0037	0.37335	1.0377	0.36321	

Element	Selenium	Selenium	Iodine	Manganese	Sulfur	Molybdenum
Isotope	Se 77	Se 80	Ir 191	Ir 191	Mo 96	Mo 96
Detector	PC	PC	PC	PC	PC	PC
Run 1	33.363	33.733	0.0	33.301	33.301	33.300
Run 2	33.723	33.460	0.0	33.501	33.567	33.512
Run 3	33.653	33.451	0.0	33.203	33.333	33.344
Mean	33.613	33.560	0.0	33.403	33.477	33.340
Std Dev	1.4931	1.5102	0.0	1.0312	0.36177	1.1200
RSD	1.3631	1.3673	0.0	1.0421	0.36473	1.1303

Element	Indium	Palladium	Silver	Silver	Tin	Tin
Isotope	In 115	Pd 103	Ag 107	Ag 109	Sn 113	Sn 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00013	0.06913	0.0474	0.0303	0.07313	0.02393
Run 2	-0.00013	0.03813	0.0601	0.03941	0.01013	0.03336
Run 3	-0.00013	0.06313	0.0311	0.03611	0.04113	0.01614
Mean	-0.00013	0.07303	0.0341	0.03610	0.03013	0.01604
Std Dev	0.00017	0.01660	0.01634	0.00703	0.01100	0.01701
RSD	433.33	21.362	1.543	1.093	0.9710	1.0031

Element	Tin	Antimony	Beryllium	Beryllium	Tin	Tin
---------	-----	----------	-----------	-----------	-----	-----

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Isotope	Sn 118	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	84.514	87.916	0.10560	0.12465	82.103	81.272
Run 2	84.531	85.347	0.09187	0.13001	80.985	80.708
Run 3	84.586	86.577	0.10081	0.11049	81.090	80.879
Mean	84.544	86.513	0.09946	0.12172	81.393	80.953
Std Dev	0.03704	1.2851	0.00701	0.01009	0.61740	0.28957
SSD	0.04433	1.4837	7.0510	8.2878	0.75854	0.36770

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Tn 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	82.173	81.792	81.499	57.194	91.236
Run 2	80.627	80.276	80.391	59.300	89.124
Run 3	81.551	81.680	80.973	57.378	90.645
Mean	81.452	81.249	80.954	57.957	90.355
Std Dev	0.78091	0.84450	0.55444	1.1665	1.1149
SSD	0.95373	1.0394	0.68488	2.0128	1.2339

#### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Holmium
Isotope	Sc 45	In 115	Ho 165
Detector	PC	PC	PC
Run 1	88.531	92.485	92.901
Run 2	88.665	94.329	94.310
Run 3	89.639	94.403	94.535
Mean	88.551	93.739	93.916
Std Dev	0.61630	1.0353	0.88551

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 0827971  
Introduction method : 200.8 ITWFS  
Sample name : 970836701S 2.5N  
First repeat started at : Wed Aug 27 1997 12:18:59  
Last repeat started at : Wed Aug 27 1997 12:21:04

Interference Equations : 200.8  
Internal standards : Sc 45 In 115 Ho 165 (Interpolating)  
Dilution Factor : 1.00000 Concentration units : ppb

Element	Silica	Beryllium	Titanium	Zirconium	Chromium	Chlorine	Nickel
Isotope	Si-28	Be-9	Ti-48	Zr-88	Cr-52	Cl-36	Ni-63
Detector	Si	Si	Si	Si	Si	Si	Si
Si-28	31.0	71.547	341.33	79.343	74.073	74.393	73.267
Be-9	0.4	75.553	333.57	75.395	74.362	74.392	73.194
Ti-48	0.9	75.553	333.45	75.357	75.368	75.412	73.567
Zr-88	0.3	75.471	333.55	75.313	74.304	74.393	73.393
Mean	0.6	75.471	333.55	75.313	74.304	74.393	73.393
Std Dev	0.8	1.58335	1.0706	1.0326	0.41337	0.41334	0.38376
RSD	0.6	1.0741	0.63731	1.4341	0.41337	0.41334	0.38369

Element	Cobalt	Nickel	Zinc	Copper	-	Mn	Arsenic
Isotope	Co-60	Ni-63	Zn-64	Co-60	-	Zn-66	As-75
Detector	PC	PC	PC	PC	-	PC	PC
Ann. 1	50.000	50.000	50.000	50.000	-	50.000	50.000
Ann. 2	50.000	50.000	50.000	50.000	-	50.000	50.000
Int. 3	50.000	50.000	50.000	50.000	-	50.000	50.000
Mean	50.000	50.000	50.000	50.000	-	50.000	50.000
Std. Dev.	0.00000	0.00000	0.00000	0.00000	-	0.00000	0.00000
SD%	0.00000	0.00000	0.00000	0.00000	-	0.00000	0.00000

Element	Selenium	Selenite	Sylvite	Silicon	Molybdenum	Molybdates
Isotope	Se-75	Se-75	Se-80	Si-29	Mo-96	Mo-98
Detector	PC	PC	PC	PC	PC	PC
Ion 1	Se-75	Se-75	Se-80	Si-29	Mo-96	Mo-98
Ion 2	Se-75	Se-75	Se-80	Si-29	Mo-96	Mo-98
Ion 3	Se-75	Se-75	Se-80	Si-29	Mo-96	Mo-98
Start	0.00	0.00	0.00	0.00	0.00	0.00
End Sec	0.00000	0.00000	0.00	0.00000	0.00000	0.00000
PPM	0.00000	0.00000	0.00	0.00000	0.00000	0.00000

卷之三

Multi-Element Concentrations

Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : 970836701D 2.5X      ITIWFD  
 First repeat started at : Wed Aug 27 1997 12:26:24  
 Last repeat started at : Wed Aug 27 1997 12:28:29

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 7	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.17835	254.59	0.52461	0.60237	0.50315	2.2317
Run 2	0.0	0.12713	252.73	-0.11012	0.48963	0.48989	2.1627
Run 3	0.0	0.10936	251.26	0.41056	0.45185	0.45215	2.1482
Mean	0.0	0.13325	252.88	0.27502	0.48145	0.48173	2.1803
Std Dev	0.0	0.03976	1.6543	0.33838	0.02645	0.02646	0.04457
$\bar{x} \pm \text{SD}$	0.0	25.557	0.65419	123.04	5.4938	5.4934	2.0437

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 65	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.3974	4.1360	2.6364	0.55672	2.0206	1.1966
Run 2	1.3912	4.0339	2.9116	0.44177	2.2302	1.2338
Run 3	1.3937	4.0044	2.5383	0.44600	2.1152	0.81713
Mean	1.3941	4.0044	2.7451	0.43183	2.1220	1.1032
Std Dev	0.09537	0.06637	0.14614	0.06407	0.10437	0.25267
$\bar{x} \pm \text{SD}$	1.3931	1.6373	5.3336	13.236	4.3468	32.903

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Kr 83	Zr 90	Mo 95	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.66613	0.66909	0.0	0.36243	11.601	12.647
Run 2	0.66903	0.64226	0.0	0.66372	12.153	12.363
Run 3	0.66501	0.66412	0.0	0.56338	12.113	12.673
Mean	0.66532	0.66348	0.0	0.76318	12.036	12.727
Std Dev	0.06308	0.06986	0.0	0.20478	0.13616	0.11473
$\bar{x} \pm \text{SD}$	66.500	66.721	0.0	27.361	11.6011	0.30164

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 103	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.02655	0.02904	0.03399	0.01398	0.19876	0.24457
Run 2	0.02636	0.03074	0.01511	0.02023	0.23863	0.23191
Run 3	0.00349	0.02177	0.02520	0.01703	0.22837	0.17968
Mean	0.01744	0.02713	0.02477	0.01707	0.22009	0.21863
Std Dev	0.01276	0.00372	0.00946	0.00314	0.02004	0.03474
$\bar{x} \pm \text{SD}$	73.207	19.351	38.161	18.369	9.1031	15.393

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

970836701D 2.5X

Element	Tds	Actinony	Selenony	Mercury	Thallium	Chromium
Isotope	Se 75	Se 113	Se 75	Se 75	Te 132	Te 132
Detector	PC	PC	PC	PC	PC	PC
eleccon:	PC	PC	PC	PC	PC	PC
ian 1	0.03703	0.43707	0.00000	0.00000	0.30708	0.26639
ian 2	0.70256	0.69254	0.00000	0.00000	0.35302	0.23071
ian 3	0.34461	0.31461	0.00000	0.00000	0.21068	0.20171
Mean	0.31463	0.37349	0.00000	0.00000	0.35300	0.23069
Std Dev	0.00166	0.07939	0.00000	0.00000	0.14480	0.03328
SSD	11.631	13.112	0.4631	53.509	15.610	14.477

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 210	Pb 210	Pb 210	Pb 210	Pb 210
Detector	PC	PC	PC	PC	PC
ian 1	0.32363	0.33461	0.34000	1.6276	0.1002
ian 2	0.24466	0.21364	0.28000	0.36007	0.1700
ian 3	0.34464	0.34364	0.33000	0.50009	0.3000
Mean	0.31766	0.31963	0.33000	1.0406	0.2000
Std Dev	0.01363	0.03036	0.02764	0.32601	0.17008
SSD	5.1977	11.094	0.3614	50.776	0.3110

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandion	Radiion	Edionon
Isotope	Se 75	Se 113	Se 75
Detector	PC	PC	PC
ian 1	51.653	51.009	51.151
ian 2	51.663	51.756	51.519
ian 3	51.651	51.519	51.511
Mean	51.456	51.596	51.451
Std Dev	0.16633	0.51026	0.15111

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 082797I  
Introduction method : 200.8 ITIWF  
Sample name : 97083670iF2.5X  
First repeat started at : Wed Aug 27 1997 12:33:50  
Last repeat started at : Wed Aug 27 1997 12:35:53

## Interference Equations : 200.8

Internal standards : SC 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Ti-48	V-51	Cr-52	Cr-53	Ni-58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.07305	263.83	0.39189	0.43634	0.43659	2.0311
Run 2	0.0	0.09222	265.51	0.08460	0.43904	0.43934	2.2015
Run 3	0.0	0.07345	265.32	-0.07684	0.42179	0.42316	2.1403
Mean	0.0	0.07964	265.22	0.49988	0.43239	0.43273	2.1410
Std Dev	0.0	0.01089	1.3397	0.51010	0.00928	0.00926	0.00026
%SD	0.0	13.678	0.50513	102.04	2.1457	2.1372	2.3145

Element	Cobalt	Nickel	Zinc	Copper	→ Zinc	Arsenic
Isotope	Co-59	Ni-60	Zn-64	Cu-65	Zn-66	As-75
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.9603	4.2603	2.5002	0.45286	1.8943	0.89277
Run 2	2.0141	4.0820	2.4054	0.44071	1.7633	0.97533
Run 3	2.0016	4.0231	2.3609	0.43899	1.7814	0.65963
Mean	1.9922	4.1227	2.4248	0.46419	1.8131	0.84279
Std Dev	0.02773	0.12305	0.07457	0.03074	0.07132	0.16352
RSD	1.3947	3.3347	3.0875	5.6233	3.9236	19.450

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se-75	Se-82	Kr-83	Zr-90	Mo-95	Mo-98
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.66774	0.56193	0.0	0.31191	12.065	12.701
Run 2	0.62752	0.50026	0.0	0.36510	12.364	12.826
Run 3	0.30305	0.38190	0.0	0.41894	13.114	13.303
Mean	0.43377	0.43551	0.0	0.36632	12.714	12.943
Std Dev	0.17796	0.18327	0.0	0.05351	0.55723	0.31614
RSD	38.233	35.199	0.0	14.643	4.4614	2.4573

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 103	Ag 107	Ag 103	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.00183	0.30393	-0.02730	0.00132	0.16240	0.13362
Run 2	0.01763	0.35233	0.01124	0.01203	0.17715	0.12937
Run 3	0.00353	0.32633	0.01640	0.03112	0.11076	0.09006
Mean	0.00054	0.33772	0.01332	0.01167	0.15010	0.11652
Std Dev	0.01001	0.03120	0.00803	0.00966	0.03486	0.02324
%SD	152.92	9.3345	41.565	82.789	23.922	19.941

~~Antimony~~ Mercury Mercury Thallium Thallium

Element	Pb	Antimony	Silver	Silver	Thallium	Thallium
Isotope	Sn 113	Se 131	Ag 109	Ag 109	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.03343	0.03034	0.03063	0.06605	0.03344	0.03473
Run 2	0.03336	0.03037	0.03042	0.06601	0.03341	0.03333
Run 3	0.03333	0.03031	0.03076	0.06604	0.03087	0.03069
Mean	0.03337	0.03031	0.03064	0.06603	0.03124	0.03365
Std Dev	0.00021	0.00002	0.00002	0.00023	0.00130	0.00026
RSD	16.423	16.410	3.0405	37.092	15.503	3.5716

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 208	Pb 207	Pb 209	Tl 203	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.16375	0.16463	0.17674	0.43173	2.3962
Run 2	0.16418	0.16273	0.15963	0.36353	2.3637
Run 3	0.16763	0.16134	0.15523	0.25736	2.3310
Mean	0.16063	0.16332	0.16315	0.36034	2.3531
Std Dev	0.01369	0.02553	0.02394	0.03636	0.03165
RSD	3.5317	15.836	12.091	27.471	1.3836

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Tellurium	Europium
Isotope	Sc 45	Tl 135	Eu 166
Detector	PC	PC	PC
Run 1	53.304	51.453	53.366
Run 2	53.315	51.153	53.369
Run 3	53.368	51.613	53.363
Mean	53.324	51.223	53.363
Std Dev	0.36351	0.33203	0.37171

## Multi-Element Concentrations Statistics for Concentration D

Wed Aug 27 1997

User Name : MANAGER EXDO

User Name : MANAGER Experiment Name : EPA  
Analysis procedure : 082797I  
Introduction method : 200.8 ITIWDF  
Sample name : 970836702F 2.5X  
First repeat started at : Wed Aug 27 1997 12:41:13  
Last repeat started at : Wed Aug 27 1997 12:43:16

### Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Ti-48	V-51	Cr-52	Cr-53	Ni-63
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.005535	261.45	0.04615	0.56551	0.36393	1.7732
Run 2	0.0	0.04620	263.31	1.2332	0.83807	0.36393	1.7403
Run 3	0.0	0.04808	259.33	0.44314	0.84214	0.34264	1.8195
Mean	0.0	0.04396	261.36	0.57418	0.84957	0.35004	1.7772
Std Dev	0.0	0.00432	1.9897	0.60423	0.01652	0.01663	0.03359
$\pm\delta$	0.0	0.3546	0.76126	103.24	1.9449	1.9567	2.5270

Element	Cobalt	Nickel	Zinc	Copper	- Zinc	Arsenic
Isotope	Co-63	Ni-60	Zn-64	Cu-65	Zn-66	As-75
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.0562	3.9919	2.7745	0.82595	2.4417	1.1507
Run 2	2.1118	4.0520	3.0837	0.84445	2.3295	0.90441
Run 3	2.0724	4.1627	2.8761	0.79377	2.2774	0.65783
Mean	2.0801	4.0688	2.9121	0.82133	2.3495	0.88099
Std Dev	0.02861	0.08663	0.15864	0.02565	0.08393	0.14724
RSD	1.3756	2.1292	5.4476	3.1227	3.5724	16.009

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se-77	Se-83	Ar-83	Zr-90	Mo-95	Mo-98
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.01343	0.52193	0.0	0.22204	10.893	11.033
Run 2	0.75194	0.78401	0.0	0.35850	10.189	11.060
Run 3	0.23697	0.23311	0.0	0.22373	11.373	11.241
Mean	0.53246	0.55502	0.0	0.26813	10.818	11.118
Std Dev	0.27235	0.27363	0.0	0.07332	0.59572	0.10579
RSD	51.244	51.032	0.0	23.209	5.5065	0.38134

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 98	Pd 103	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00383	0.31358	0.01770	0.01153	0.15307	0.08214
Run 2	0.06082	0.25496	0.03553	0.03066	0.17798	0.16919
Run 3	-0.01841	0.29371	0.01945	0.01052	0.15376	0.03652
Mean	0.01543	0.28742	0.02424	0.01757	0.16160	0.11795
Std Dev	0.04030	0.02930	0.00932	0.01134	0.01413	0.04065
SSD	264.84	10.368	40.537	64.510	8.7771	40.343

~~Element~~      ~~Sin~~      ~~Assimony~~      ~~Mercurt~~      ~~Mercury~~      ~~Thallium~~      ~~Thallium~~

Element	Tin	Antimony	Boron	Mercury	Lead	Thallium
Isotope	Sn 113	Sb 124	B 107	Hg 201	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Sample	0.37634	0.46933	0.06713	0.06581	0.14730	0.14133
Run 2	0.32141	0.33933	0.04633	0.06303	0.09937	0.13343
Run 3	0.36831	0.37533	0.05803	0.06237	0.13687	0.13530
Mean	0.36933	0.37533	0.05733	0.06232	0.13734	0.13433
Std Dev	0.02713	0.07033	0.02154	0.01561	0.03153	0.00832
SD%	7.5237	19.547	25.560	30.537	23.317	6.1522

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 205	Pb 207	Pb 208	Tb 231	U 236
Detector	PC	PC	PC	PC	PC
Run 1	1.1874	1.1104	1.1007	0.10326	1.9262
Run 2	1.1273	1.1233	1.1237	0.10333	1.9350
Run 3	1.1013	1.1033	1.1033	0.10333	1.9313
Mean	1.1223	1.1103	1.1044	0.10333	1.9311
Std Dev	0.06443	0.06737	0.03533	0.01635	0.03537
SD%	5.7635	6.16314	3.1236	10.717	4.1761

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Tin	Lead
Isotope	Sc 45	Tl 205	Tl 205
Detector	PC	PC	PC
Run 1	50.333	50.337	50.333
Run 2	50.413	50.333	50.337
Run 3	50.333	50.330	50.337
Mean	50.370	50.333	50.333
Std Dev	0.33233	0.13331	0.43337

## Multi-Element Concentrations Statistics for Concentration D

Wed Aug 27 1997

User Name : MANAGER Exp

User name : ANTHONY  
Analysis procedure : 082797I  
Introduction method : 200.8  
Sample name : 970836704F2.5X IT5WF  
First repeat started at : Wed Aug 27 1997 12:48:37  
Last repeat started at : Wed Aug 27 1997 12:50:40

Interference Equations : 200.8  
Internal standards : Sc 45 In 115 Ho 165 (Interpolating)  
Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Ti-48	V-51	Cr-52	Cr-53	Ni-68
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.03872	142.57	3.9137	9.6192	9.6243	1.3936
Run 2	0.0	0.03853	143.70	4.5687	9.7429	9.7429	1.5161
Run 3	0.0	0.02736	142.36	3.9316	9.8207	9.8215	1.5180
Mean	0.0	0.03487	142.88	4.1380	9.7276	9.7296	1.4759
Std Dev	0.0	0.00030	0.72238	0.37309	0.10159	0.09930	0.07135
%	0.0	18.652	0.50559	9.0163	1.0443	1.0206	4.8279

Element	Cobalt	Nickel	Zinc	Copper	- Zinc	Arseznic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 65	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.21423	2.3876	3.5718	4.0323	2.5316	5.7841
Run 2	0.23503	2.4939	3.6642	3.9821	2.4380	4.7643
Run 3	0.24614	2.4932	3.5322	4.0062	2.4381	5.1699
Total	0.53532	2.4599	3.5594	4.0263	2.4392	5.2337
Std Dev	0.01655	0.00264	0.00775	0.04233	0.04737	0.51870
RSD	7.1973	2.5454	1.9975	1.0511	1.3028	9.4113

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se-77	Se-83	Kr-83	Zr-90	Mo-95	Mo-98
Detector	PC	PC	PC	PC	PC	PC
Run 1	4.2939	4.3125	0.0	0.27450	40.011	41.581
Run 2	3.3309	3.3306	0.0	0.29127	41.334	40.645
Run 3	3.9445	3.9462	0.0	0.30583	40.341	43.129
Mean	3.6654	3.8631	0.0	0.30053	40.343	41.453
Std Dev	0.43019	0.49624	0.0	0.01567	0.34153	0.81809
SD	12.704	12.846	0.0	3.5352	0.33430	1.3734

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 98	Pd 106	Ag 107	Ag 109	Cd 111	Cd 113
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.01230	0.15678	0.01143	0.01845	0.17940	0.16667
Run 2	-0.00700	0.19000	0.00909	0.01235	0.22747	0.08512
Run 3	-0.00703	0.13644	0.02351	0.01225	0.10067	0.15458
Mean	-0.00377	0.16108	0.01663	0.01452	0.15918	0.13379
Std Dev	0.00305	0.02704	0.01117	0.00342	0.06402	0.04344
SESD	34.792	16.784	56.993	22.556	37.819	31.955

**Mercurial**      **Mercurial**      **Mercurial**      **Mercurial**      **Mercurial**      **Thalline**      **Thalline**

Element	Pt	Actinium	Berillium	Boron	Thallium	Thallium
Isotope	Sc 113	Sc 131	Sc 200	Sc 201	Tl 200	Tl 200
Detector	PC	PC	PC	PC	PC	PC
Inv 1	0.73610	1.00001	0.10000	0.00007	0.07001	0.00010
Inv 2	0.73603	1.00002	0.10000	0.00006	0.07000	0.00009
Inv 3	0.73603	1.00003	0.10000	0.00006	0.07000	0.00009
Mean	0.73603	1.00003	0.10000	0.00006	0.07000	0.00009
Std Dev	0.00006	0.00003	0.00000	0.00004	0.00001	0.00003
SDP	0.1700	0.00006	0.00000	26.370	0.00007	13.540

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Pb 208	U 238
Detector	PC	PC	PC	PC	PC
Inv 1	1.0720	1.0000	1.0000	0.00004	7.2000
Inv 2	0.99174	1.0000	1.0000	0.00003	7.4000
Inv 3	1.0342	1.0704	1.0000	0.00003	7.4000
Mean	1.0027	1.0000	1.0000	0.00004	7.3500
Std Dev	0.00017	0.00003	0.00004	0.00100	0.10000
SDP	0.0007	0.00003	0.00003	11.366	1.3700

**Internal Standard Drift; % relative to mean of first sample :**

Element	Scandium	Indium	Solaius
Isotope	Sc 45	In 115	Sc 131
Detector	PC	PC	PC
Inv 1	81.254	81.367	81.100
Inv 2	80.415	80.303	81.200
Inv 3	80.935	80.800	81.000
Mean	80.833	80.800	81.000
Std Dev	0.41000	0.12000	0.00000

Multi-Element Concentrations Wed Aug 27 1997

Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : 970843901 2.5X  
 first repeat started at : Wed Aug 27 1997 12:56:01  
 Last repeat started at : Wed Aug 27 1997 12:58:04

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	1.2899	32.485	40.410	18.388	18.411	110.42
Run 2	0.0	1.2882	32.554	41.345	18.691	18.714	111.32
Run 3	0.0	1.2851	32.060	40.794	18.498	18.481	103.55
Mean	0.0	1.2877	32.366	41.049	18.512	18.535	110.43
Std Dev.	0.0	0.00247	0.26740	0.79877	0.15872	0.15891	0.88682
%SD	0.0	0.19172	0.28350	1.9455	0.85736	0.85731	0.80304

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	11.607	13.008	60.435	21.734	59.203	12.303
Run 2	11.546	13.384	60.214	21.919	59.612	12.510
Run 3	11.245	13.023	59.403	21.540	58.603	12.807
Mean	11.467	13.138	60.017	21.731	59.141	12.707
Std Dev.	0.19185	0.31267	0.54343	0.18932	0.50455	0.17050
%SD	1.6730	1.5137	0.90346	0.87118	0.85313	1.3418

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Kr 83	Zr 90	Mo 93	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.6891	1.7040	0.0	5.3840	27.374	28.519
Run 2	1.6993	2.0159	0.0	5.8564	27.855	28.395
Run 3	1.8725	1.5856	0.0	5.3101	27.832	27.939
Mean	1.8000	1.8686	0.0	5.7268	27.387	28.184
Std Dev.	0.16589	0.15684	0.0	0.23716	0.07604	0.52385
%SD	9.4103	8.5895	0.0	5.1889	0.37267	1.8970

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.02396	1.7829	1.0362	1.1581	0.31994	0.27771
Run 2	0.03558	1.5570	1.0426	1.0364	0.37945	0.33795
Run 3	0.00121	1.3559	1.0555	1.0930	0.39123	0.32323
Mean	0.02026	1.7353	1.0514	1.1092	0.39639	0.31295
Std Dev.	0.01743	0.16026	0.00762	0.04236	0.02082	0.03140
%SD	86.346	8.6533	0.72449	3.5205	7.0130	10.034

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

70843901 2.5X

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sr 88	Sr 88	Sr 88	Sr 88	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.38804	0.51221	0.19331	0.19312	0.21556	0.20832
Run 2	0.38233	0.50372	0.19330	0.19394	0.21454	0.20329
Run 3	0.38236	0.50269	0.19330	0.19329	0.21507	0.20563
Mean	0.38807	0.50281	0.19330	0.19312	0.21553	0.20500
Std Dev	0.02790	0.00286	0.00019	0.00065	0.00380	0.01446
RSD	3.8251	0.5393	13.093	20.744	15.363	6.7044

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 208	Pb 207	Pb 209	Tb 231	U 238
Detector	PC	PC	PC	PC	PC
Run 1	20.373	19.569	20.299	19.871	1.3398
Run 2	21.376	19.556	20.321	20.093	1.1456
Run 3	21.357	19.576	20.334	20.074	1.1162
Mean	21.456	19.554	20.303	19.970	1.1672
Std Dev	0.45362	0.14714	0.17020	0.09407	0.04656
RSD	2.0216	0.71666	0.83364	0.47243	0.39046

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Sodium
Isotope	Sc 45	In 115	Na 22
Detector	PC	PC	PC
Run 1	76.380	76.730	74.359
Run 2	77.431	76.819	75.716
Run 3	76.416	76.691	76.109
Mean	77.400	76.693	75.651
Std Dev	1.0031	0.93501	0.58331

Multi-Element Concentrations

Wed Aug 27 1997

Statistics for Concentration Determination.

User Name : MANAGER      Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : 970844101 2.5X  
 First repeat started at : Wed Aug 27 1997 13:03:25  
 Last repeat started at : Wed Aug 27 1997 13:05:28

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 53
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.04933	21.004	83.227	7.2320	7.2374	2.0219
Run 2	0.0	0.05163	21.002	84.253	7.1469	7.1499	2.0417
Run 3	0.0	0.04371	20.834	84.144	7.0507	7.0534	1.9803
Mean	0.0	0.04824	20.947	83.878	7.1432	7.1469	2.0146
Std Dev	0.0	0.00410	0.09743	0.56536	0.09069	0.09203	0.03134
KSD	0.0	3.4502	0.46513	0.67404	1.2636	1.2876	1.5556

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.23117	0.51655	28.105	1.4398	28.599	26.131
Run 2	0.23534	0.53568	28.245	1.3384	29.961	26.336
Run 3	0.23356	0.54033	28.073	1.4528	29.612	25.868
Mean	0.23336	0.53618	28.163	1.4137	29.391	26.112
Std Dev	0.00209	0.05538	0.08930	0.04922	0.70760	0.23462
KSD	0.02604	9.1397	0.31731	3.4814	2.4076	0.89661

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Ar 83	Zr 90	Mo 95	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.1726	1.1797	0.0	0.64669	4.7659	4.2681
Run 2	0.79503	0.79862	0.0	0.66610	4.6020	4.5839
Run 3	1.2313	1.2849	0.0	0.63203	4.3041	4.5377
Mean	1.0832	1.0978	0.0	0.64831	4.7775	4.4719
Std Dev	0.25488	0.25586	0.0	0.01710	0.12132	0.16131
KSD	20.539	23.522	0.0	2.6371	2.5372	3.6671

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.01009	0.00241	0.03914	0.03046	0.15373	0.12708
Run 2	0.00586	0.06322	0.03461	0.04533	0.19633	0.09335
Run 3	0.01317	0.10534	0.01631	0.03632	0.03093	0.13459
Mean	0.00245	0.07639	0.03013	0.03737	0.14566	0.11631
Std Dev	0.01765	0.02450	0.01172	0.00749	0.05897	0.03196
KSD	723.17	31.334	33.820	20.048	40.437	13.589

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

970844101 2.5X

Element	Rb	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sr 88	Sr 88	Sr 88	Sr 88	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
Ins 1	0.06907	0.31329	0.17339	0.14150	0.06055	0.04962
Ins 2	0.06776	0.17609	0.16334	0.16000	0.06367	0.05792
Ins 3	0.06624	0.13709	0.13539	0.13440	0.06329	0.04930
Mean	0.06753	0.20366	0.17363	0.14441	0.06073	0.04915
Std Dev	0.00360	0.03692	0.01664	0.01761	0.00418	0.00352
SSD	22.331	13.136	15.445	15.136	7.4339	17.337
Element	Lead	Lead	Lead	Thorium	Uranium	
Isotope	Pb 205	Pb 207	Pb 208	Ta 183	U 235	
Detector	PC	PC	PC	PC	PC	
Ins 1	1.0059	1.0051	0.99553	0.94933	0.7609	
Ins 2	0.99585	0.98140	0.98135	0.91614	0.5125	
Ins 3	0.97026	1.0471	0.95137	0.51135	0.5162	
Mean	0.99402	0.97183	0.98015	0.69292	0.5306	
Std Dev	0.01342	0.09766	0.04524	0.07092	0.04916	
SSD	3.2274	15.963	3.0903	11.938	1.9383	

### Internal Standard Drift; % relative to mean of first sample :

Element	Sodium	Calcium	Sodium
Isotope	Sr 88	Sr 88	Sr 88
Detector	PC	PC	PC
Ins 1	92.054	95.421	95.090
Ins 2	91.130	95.195	91.346
Ins 3	91.570	95.020	91.371
Mean	91.700	95.107	93.451
Std Dev	0.67034	0.65443	0.67103

Multi-Element Concentrations                    Wed Aug 27 1997  
Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
Analysis procedure : 082797I  
Introduction method : 200.8  
Sample name : 970844401 2.5K  
First repeat started at : Wed Aug 27 1997 13:10:49  
Last repeat started at : Wed Aug 27 1997 13:12:53

Interference Equations : 200.8  
Internal standards : Sc 45 In 115 Ho 165 (Interpolating)  
Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li-6	Be-9	Ti-48	V-51	Cr-52	Cr-53	Ni-58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.02326	24.690	5.5038	0.63478	0.63545	1.0516
Run 2	0.0	0.02234	23.677	5.3921	0.63132	0.63186	1.0933
Run 3	0.0	0.02237	24.075	4.9086	0.70906	0.70962	1.0132
Mean	0.0	0.02332	24.147	5.2682	0.65839	0.65898	1.0520
Std Dev	0.0	0.000154	0.51051	0.31636	0.04332	0.04390	0.03977
	0.0	6.5477	2.1141	6.0051	6.6705	6.6615	3.7783

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 69	Ni 60	Zn 64	Cu 65	Zn 66	As 76
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.08340	0.36037	34.476	0.50305	35.813	5.7635
Run 2	0.08335	0.32348	33.972	0.46934	34.708	5.5418
Run 3	0.06827	0.34363	34.057	0.47746	34.249	5.7194
Mean	0.07903	0.34416	34.168	0.50401	34.923	5.6760
Std Dev	0.00337	0.02195	0.20955	0.03301	0.80388	0.11929
RSD	11.863	5.3730	0.78823	10.517	2.3018	2.1015

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Ar 83	Zr 90	Mo 95	Mo 96
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.30937	0.24054	0.0	0.57690	5.4337	3.7635
Run 2	0.48336	0.48681	0.0	0.52890	8.7346	3.4003
Run 3	0.41317	0.41632	0.0	0.50899	5.3737	3.3655
Mean	0.37803	0.38222	0.0	0.50861	8.4324	3.5700
Std Dev	0.12010	0.12511	0.0	0.03478	0.23385	0.20069
zSD	31.047	32.733	0.0	6.4575	2.7569	2.7300

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 93	Pd 103	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.01355	0.08037	0.00274	0.01013	0.03732	0.03070
Run 2	-0.01134	0.14350	0.01200	0.00557	0.03443	0.03203
Run 3	-0.01647	0.09312	0.01357	-0.00448	0.14666	0.03260
Mean	-0.01373	0.10693	0.01143	0.00374	0.10943	0.03046
Std Dev	0.00257	0.03661	0.00340	0.00747	0.03279	0.00326
%SD	18.663	34.127	73.720	199.34	29.964	10.715

**Table 1.** Comparison of the relative toxicity of various thallium compounds to the *Thallium* and *Thallium* test organisms.

Element	Tin	Antimony	Silver	Mercury	Thallium	Thallium
Isotope	Sr 86	Sr 87	Sr 86	Sr 86	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
sector	PC	PC	PC	PC	PC	PC
Run 1	0.02361	0.03533	0.13163	0.00336	0.04576	0.02494
Run 2	0.16346	0.14336	0.09763	0.13236	0.03540	0.03310
Run 3	0.20337	0.16530	0.08743	0.16177	0.02733	0.03431
Mean	0.10045	0.13639	0.12557	0.11763	0.04066	0.03131
Std Dev	0.00968	0.00637	0.00714	0.01609	0.00442	0.00604
SDS	15.363	26.553	45.747	39.192	10.876	13.174

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 205	Tb 232	U 235
Detector	PC	PC	PC	PC	PC
Run 1	0.33115	0.35717	0.33201	0.12079	6.3346
Run 2	0.37323	0.34430	0.38532	0.18162	6.3333
Run 3	0.33357	0.33333	0.33333	0.18105	6.7140
Mean	0.33463	0.33313	0.33333	0.18143	6.3336
Std Dev	0.03337	0.00630	0.02773	0.00273	0.12263
SDS	5.3662	4.2338	3.0734	5.7746	1.7830

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Sodium
Isotope	Sc 45	In 115	Sc 115
Detector	PC	PC	PC
Run 1	55.512	55.357	55.364
Run 2	55.246	55.043	55.043
Run 3	55.007	55.034	55.002
Mean	55.163	55.141	55.150
Std Dev	0.16136	1.2076	0.09131

Multi-Element Concentrations                            Wed Aug 27 1997  
 Statistics for Concentration Determination.  
 User Name : MANAGER                                    Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : CCVI  
 First repeat started at : Wed Aug 27 1997 13:18:18  
 Last repeat started at : Wed Aug 27 1997 13:20:24

Interference Equations : 200.8  
 Internal standards : Sc 45 In 115 Ho 165 (Interpolating)  
 Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 68
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.00464	0.30147	100.29	99.833	99.788	96.414
Run 2	0.0	0.0107	0.30615	100.38	100.02	99.956	96.971
Run 3	0.0	0.0166	0.30312	100.04	100.62	100.56	96.453
Mean	0.0	0.01356	0.303691	100.23	100.16	100.10	96.513
Std Dev	0.0	0.01516	0.02936	0.16842	0.41214	0.40763	0.31084
RSD	0.0	0.00733	0.7135	0.16803	0.41149	0.40721	0.32174

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 60	Ni 60	Zn 64	Cu 65	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	96.757	96.612	96.758	95.775	98.143	98.433
Run 2	96.669	97.367	96.407	95.221	97.313	96.919
Run 3	96.216	97.550	96.086	96.425	98.351	97.632
n	96.548	97.377	96.417	95.807	98.102	97.661
Std Dev	0.29039	0.69380	0.33613	0.60286	0.76973	0.75719
RSD	0.30073	0.71250	0.34863	0.62925	0.78462	0.77533

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 75	Se 82	Kr 83	Zr 90	Mo 95	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	100.78	100.55	0.0	0.00913	0.08370	0.10466
Run 2	100.07	99.746	0.0	0.01569	0.07458	0.08743
Run 3	99.456	99.189	0.0	0.01081	0.10481	0.07911
Mean	100.11	99.829	0.0	0.01188	0.08770	0.09040
Std Dev	0.64937	0.68306	0.0	0.00340	0.01550	0.01303
RSD	0.64604	0.68623	0.0	23.670	17.677	14.416

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 90	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.00438	0.06328	9.5874	9.7427	100.50	100.92
Run 2	0.03336	0.05046	9.8321	10.219	100.83	100.57
Run 3	0.02316	0.05332	9.7342	9.3841	100.39	99.856
Mean	0.01721	0.05553	9.7373	9.9821	100.55	100.45
Std Dev	0.01059	0.01635	0.15169	0.23833	0.22904	0.34387
RSD	113.84	24.935	1.3524	2.3876	0.22772	0.54144

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

Element	Tin	Antimony	Mercury	Silver	Thallium	Thallium
Isotope	Sn 113	Sb 127	Hg 200	Ag 203	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.00364	0.00335	0.00367	0.00141	38.343	39.125
Run 2	0.00365	0.00351	0.00350	0.00174	39.012	38.839
Run 3	0.00303	0.00403	0.00304	0.00149	100.57	100.64
Mean	0.00355	0.00373	0.00373	0.00166	39.509	39.555
Std Dev	0.00044	0.00076	0.00062	0.00021	1.2591	0.34725
RSD	35.323	45.303	33.333	23.447	1.2593	0.33163
Element	Lead	Boron	Lead	Thorium	Uranium	
Isotope	Pb 206	Ps 207	Pb 208	Ta 182	U 235	
Detector	PC	PC	PC	PC	PC	
Run 1	33.337	33.330	33.333	0.02333	0.01442	
Run 2	33.363	33.363	33.373	0.00023	0.01727	
Run 3	33.354	33.357	33.353	-0.00007	0.01176	
Mean	33.363	33.353	33.352	0.00704	0.01443	
Std Dev	0.00407	1.0273	0.07336	0.01941	0.00274	
RSD	0.48763	1.0080	0.63313	275.72	16.546	

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Tellurite	Scandium
Isotope	Sc 45	Te 138	Sc 45
Detector	PC	PC	PC
Run 1	36.348	100.33	101.73
2	36.031	101.13	101.33
Run 3	37.074	101.33	100.46
Mean	36.348	101.11	101.33
Std Dev	0.33642	0.16161	0.33723

Multi-Element Concentrations

Wed Aug 27 1997

Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA

Analysis procedure : 082797I

Introduction method : 200.8

Sample name : CCV2

First repeat started at : Wed Aug 27 1997 13:25:45

Last repeat started at : Wed Aug 27 1997 13:27:49

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.14395	0.18913	0.31145	0.41199	0.41177	0.11520
Run 2	0.0	0.09898	0.20288	0.67002	0.42633	0.42618	0.11039
Run 3	0.0	0.08471	0.19202	0.74368	0.38615	0.38537	0.08255
Mean	0.0	0.10308	0.19461	0.57505	0.40816	0.40737	0.10273
Std Dev	0.0	0.03098	0.00714	0.23124	0.02038	0.02037	0.01765
XSD	0.0	23.402	3.6670	40.211	4.9880	4.9936	17.182

Element	Cobalt	Nickel	Zinc	Copper	- Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.09368	0.08752	0.16608	0.12667	0.11280	0.33798
Run 2	0.08215	0.08149	0.13998	0.16027	0.16796	0.27489
Run 3	0.06092	0.07665	0.11880	0.14494	0.11396	0.17170
Mean	0.08092	0.08189	0.14162	0.14396	0.13151	0.26152
Std Dev	0.01341	0.00545	0.02369	0.01682	0.03157	0.08394
XSD	23.987	6.6546	16.723	11.682	24.010	32.096

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Kr 83	Zr 90	Mo 95	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.27290	0.27096	0.0	1.1850	0.05124	-0.31562
Run 2	0.08143	0.08024	0.0	1.3332	0.02195	-0.32774
Run 3	0.01944	0.01801	0.0	1.1709	0.03320	-0.03992
Mean	0.12453	0.12307	0.0	1.2297	0.03346	-0.21443
Std Dev	0.13213	0.13180	0.0	0.08939	0.01477	0.11392
XSD	106.05	107.09	0.0	7.3099	41.656	53.127

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 99	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	100.19	39.885	0.03704	0.03204	0.18769	0.02464
Run 2	101.74	100.82	0.03167	0.03821	0.17441	-0.14438
Run 3	102.00	101.11	0.04230	0.02048	0.15170	0.03857
Mean	101.33	100.66	0.04367	0.02891	0.17127	-0.00706
Std Dev	0.33390	0.64078	0.01274	0.00589	0.01820	0.12454
XSD	0.38679	0.83893	29.177	21.395	10.626	1764.3

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sn 113	Sb 121	Hg 200	Hg 202	Tl 203	Tl 205
Detector	PC	PC	PC	PC	PC	PC
Run 1	99.573	101.17	0.04292	0.11290	0.26365	0.23430
Run 2	101.02	101.34	0.08752	0.02222	0.16472	0.15639
Run 3	100.13	101.33	0.05408	0.03380	0.17065	0.14173
Mean	99.559	101.43	0.06154	0.03684	0.16974	0.17766
Std Dev	1.1667	0.40256	0.02326	0.01867	0.03343	0.04384
RSD	1.1632	0.39610	01.800	05.033	27.752	27.340

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 205	Tb 232	U 235
Detector	PC	PC	PC	PC	PC
Run 1	0.12851	0.31754	0.16733	58.829	103.16
Run 2	0.11180	0.33467	0.15545	101.84	103.03
Run 3	0.07663	0.33660	0.11766	104.78	106.77
Mean	0.10330	0.32974	0.14700	101.81	104.93
Std Dev	0.02987	0.01025	0.02616	2.5817	1.8771
RSD	23.333	3.1112	17.795	2.5286	1.7679

### Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Niobium
Isotope	Sc 45	In 115	Nb 185
Detector	PC	PC	PC
Run 1	98.307	100.78	100.92
Run 2	99.917	101.69	102.18
Run 3	99.633	101.56	101.47
Mean	99.287	101.44	101.52
Std Dev	0.36836	0.57733	0.65073

Multi-Element Concentrations Wed Aug 27 1997

## Statistics for Concentration Determination.

User Name : MANAGER Experiment name : EPA  
 Analysis procedure : 082797I  
 Introduction method : 200.8  
 Sample name : CCB1  
 first repeat started at : Wed Aug 27 1997 13:33:11  
 Last repeat started at : Wed Aug 27 1997 13:35:16

Interference Equations : 200.8

Internal standards : Sc 45 In 115 Ho 165 (Interpolating)

Dilution Factor : 1.00000 Concentration units : ppb

Element	Lithium	Beryllium	Titanium	Vanadium	Chromium	Chromium	Nickel
Isotope	Li 6	Be 9	Ti 48	V 51	Cr 52	Cr 53	Ni 58
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0	0.04948	0.18197	-0.10761	0.10736	0.10715	0.04483
Run 2	0.0	0.04953	0.22789	0.04444	0.12654	0.12644	0.03596
Run 3	0.0	0.04363	0.13597	0.25439	0.12479	0.12469	0.06457
Mean	0.0	0.04757	0.18194	0.00374	0.11936	0.11943	0.04845
Std Dev	0.0	0.00341	0.04596	0.18177	0.01061	0.01067	0.01454
XSD	0.0	7.1738	25.261	285.17	8.8716	8.9307	30.222

Element	Cobalt	Nickel	Zinc	Copper	Zinc	Arsenic
Isotope	Co 59	Ni 60	Zn 64	Cu 65	Zn 66	As 75
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.03294	0.03408	0.17222	0.09121	0.20496	0.15840
Run 2	0.03397	0.02632	0.19759	0.08536	0.21200	0.02097
Run 3	0.02855	0.01929	0.11666	0.08923	0.30172	0.12349
Mean	0.03335	0.02656	0.16216	0.07860	0.23956	0.10295
Std Dev	0.00326	0.00740	0.04139	0.01703	0.03395	0.07246
XSD	15.766	27.849	25.525	21.660	22.519	70.379

Element	Selenium	Selenium	Krypton	Zirconium	Molybdenum	Molybdenum
Isotope	Se 77	Se 82	Ar 83	Zr 90	Mo 95	Mo 98
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.03240	0.03009	0.0	0.02770	0.09782	0.03329
Run 2	0.00230	0.00118	0.0	0.02694	0.04713	0.01847
Run 3	-0.07991	-0.08093	0.0	-0.00597	-0.02116	0.02677
Mean	-0.01507	-0.01653	0.0	0.01622	0.04126	0.04333
Std Dev	0.05814	0.05760	0.0	0.01922	0.03971	0.01411
XSD	385.76	347.36	0.0	118.43	144.03	32.342

Element	Ruthenium	Palladium	Silver	Silver	Cadmium	Cadmium
Isotope	Ru 96	Pd 105	Ag 107	Ag 109	Cd 111	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.16454	0.22075	0.01008	0.00695	0.12553	0.10234
Run 2	0.16412	0.13618	0.01304	0.00865	0.06742	0.07622
Run 3	0.13606	0.13044	0.00993	0.00495	0.08209	0.09360
Mean	0.14757	0.16246	0.01102	0.00685	0.06502	0.09339
Std Dev	0.02102	0.05057	0.00176	0.00185	0.03519	0.01453
XSD	14.242	31.126	15.963	27.019	41.388	15.638

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
---------	-----	----------	---------	---------	----------	----------

CCB1

Element	Tin	Antimony	Mercury	Mercury	Thallium	Thallium
Isotope	Sr 88	Sr 88	Sr 88	Sr 88	Tl 203	Tl 203
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.58032	0.21966	0.09957	0.09458	0.08835	0.10083
Run 2	0.43377	0.12254	0.07703	0.07777	0.10995	0.09259
Run 3	0.34193	0.10113	0.11361	0.04787	0.07368	0.07634
Mean	0.44621	0.14730	0.03363	0.05341	0.09066	0.08664
Std Dev	0.10384	0.00313	0.02093	0.01456	0.01825	0.01270
SSD	24.671	42.725	21.266	24.507	20.128	14.655

Element	Lead	Lead	Lead	Thorium	Uranium
Isotope	Pb 206	Pb 207	Pb 208	Ta 232	U 238
Detector	PC	PC	PC	PC	PC
Run 1	0.07025	0.02531	0.05856	1.7997	0.13940
Run 2	0.05434	-0.00187	0.04322	1.0879	0.08316
Run 3	0.04900	0.00033	0.04334	0.82023	0.07660
Mean	0.05700	0.02134	0.05038	1.2369	0.10038
Std Dev	0.01100	0.00121	0.00772	0.50493	0.03400
SSD	15.101	111.70	15.329	40.825	33.926

### Internal Standard Drift; % relative to mean of first sample :

Element	Scapesium	Indium	Neinium
Isotope	Sc 45	In 115	In 115
Detector	PC	PC	PC
Run 1	100.73	104.35	104.00
Run 2	103.07	104.09	104.09
Run 3	103.02	104.76	104.35
Mean	102.37	104.06	104.11
Std Dev	1.3347	0.29132	0.44375

## ICP 61T

METHOD #200.7CLP

Analyst F. WEBER  
R. HOWARDDATE 08-2<sup>8</sup>-97JEM  
9/2/97

STANDARD	ANALYST	MANUFACTURER	PREP DATE	STD #	TIME
CAL4D	FXW	INORGANIC VENTURES	08-26-97	35744	0800
CAL4	RH	INORGANIC VENTURES	08-20-97	35691	1945
CAL2D	RH	INORGANIC VENTURES	08-11-97	35553	1510
CAL1D	RH	INORGANIC VENTURES	08-19-97	35673	1605
CAL1	RH	INORGANIC VENTURES	08-19-97	35672	1600
CAL3	FXW	INORGANIC VENTURES	08-22-97	35711	0800
CAL5	RH	INORGANIC VENTURES	08-11-97	35556	1530
ICV3	RH	INORGANIC VENTURES	08-26-97	35747	2030
ICV123	FXW	INORGANIC VENTURES	08-22-97	35713	0810
ICSA	RH	INORGANIC VENTURES	08-26-97	35748	2035
ICSAB	RH	INORGANIC VENTURES	08-26-97	35749	2040
CRI	FXW	HIGH PURITY	08-22-97	35712	0805
CCV4	FXW	INORGANIC VENTURES	08-26-97	35744	0800
CCV123	RH	INORGANIC VENTURES	08-26-97	35750	2045

COMPUTER

FILENAME:

82<sup>8</sup>97AJEM  
9/2/97

ICP Runlog  
Instrument-61T

Computer File Name	82897A	Preparation Date	N/A
Analyst	F.Weber	Instrumental Analysis Date	8-28-97
SDG Number	N/A	Method Number	200.7 CLPM

Sample ID#	Batch #	Initial Weight or Volume	Final Volume	Dilution Factor	Comments
\$0	N/A	N/A	N/A	N/A	SS=478
\$					# 357-14
\$					# 35691
\$					# 35553
\$					# 35673
\$					# 35672
\$			-		# 35711
\$			-		# 35556
ICU					click off
TCU					# 35747
ICU					# 35713
ICB					
ICSA					# 35745
ICSA/B					# 35747
CRI					# 35712
CCW					# 35744
CCW					# 35750
CCB	✓	✓	✓	✓	
PBW	09269704	100mL	100mL	1X	Pass
LCSW					Pass
970836701F					1364-226
970836701F\$					
970836701FD				✓	
970836701FL	✓	✓	✓	SX	✓

Secondary Review By: J. Meiss Date: 9/3/97

**ICP Runlog  
Instrument-61T**

Computer File Name	82897A	Preparation Date	N/A
Analyst	F. Webster	Instrumental Analysis Date	8-28-97
SDG Number	N/A	Method Number	200.7 CLPM

Sample ID#	Batch #	Initial Weight or Volume	Final Volume	Dilution Factor	Comments
970836702F	08269704	100ml	100ml	1X	1364-226
970836704F					↓
970837901					1577-001
970837901\$		↓	↓	↓	↓
CCU	N/A	N/A	N/A	N/A	
CCU					
CCB		↓	↓	↓	
970837901D	08269704	100ml	100ml	1X	1577-001
970837901L				5X	
970837902				1X	
970837903					
970837905					
970843715					↓
970846603					2441-007
970846603\$					
970846603D					
970846603L		↓	↓	↓	↓
CCU	N/A	N/A	N/A	N/A	
CCU					
CCB		↓	↓	↓	
970846013	08269704	100ml	100ml	1X	2441-001
970846013\$					
970846013D					↓
970846013L				SX	↓

Secondary Review By: J. M. Webb Date: 9/3/97

**ICP Runlog**  
**Instrument-61T**

Computer File Name	82897A	Preparation Date	N/A
Analyst	F.Weber	Instrumental Analysis Date	8-78-97
SDG Number	N/A	Method Number	2027 CLPM

Sample ID#	Batch #	Initial Weight or Volume	Final Volume	Dilution Factor	Comments
97084603F	08269704	100ml	100ml	1X	2441-001
97084631S					
970846316				✓	
970837901A					PDS Al <0.80%
970846603A				✓	PDS Al <6.8%
CLV	N/A	N/A	N/A	N/A	
CLV	↓	↓	↓	↓	
CLB	↓	↓	↓	↓	
PBS	08269705	1.00	200	1X	passed
CLB		1.22			
970840103		1.05			2441-001
970840103S		1.35			use Mn 3441
970840103D		1.34			use Mn 3441
970840103A		1.05			cd } ss } 2XCRDL
970840103L		1.05		5X	
970840104		1.03		1X	
970840001		1.07			
970846009	↓	1.05	↓	↓	
CLV	N/A	N/A	N/A	N/A	
CLV	↓	↓	↓	↓	
CLB	↓	↓	↓	↓	
970846001	08269703	1.19	200	1X	2441-001
970846015		1.19			
970846008	↓	1.21	↓	↓	

Secondary Review By: J. Muller Date: 9/3/97

Method: MEIN1 Standard: BLANK

	Al3082	As1890	Ba4934	Be3130	Cd2265	Ca3179	Cr2677
Avg	.01655	-.00397	.00008	-.04238	-.00317	.00331	.00069
SDev	.00021	.00060	.00002	.00046	.00109	.00001	.00011
%RSD	1.2556	15.016	19.921	1.074?	34.258	.17997	16.111
#1	.01631	-.00329	.00007	-.04192	-.00386	.00332	.00057
#2	.01667	-.00424	.00010	-.04283	-.00192	.00331	.00079
#3	.01667	-.00438	.00009	-.04241	-.00374	.00330	.00070
Elem	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Mn3441	Ni2316
Avg	.00022	.00421	.00074	.00001	.00090	.00217	-.00113
SDev	.00023	.00002	.00011	.00001	.00002	.00054	.00008
%RSD	102.01	.37463	14.249	91.638	2.0985	25.064	7.4160
#1	.00043	.00421	.00076	.00000	.00092	.00171	-.00114
#2	.00026	.00423	.00084	.00001	.00088	.00277	-.00104
#3	-.00002	.00420	.00063	.00001	.00092	.00203	-.00120
Elem	K_7664	Ag3280	Na3302	Tl1908	V_2924	Zn2138	Mo2020
Avg	.00088	.00023	-.00163	-.00734	.00006	.00031	.00240
SDev	.00008	.00011	.00012	.00078	.00004	.00002	.00011
%RSD	8.6607	49.681	7.6051	10.627	62.013	5.4238	4.7283
#1	.00086	.00013	-.00174	-.00650	.00002	.00031	.00243
#2	.00097	.00035	-.00150	-.00804	.00007	.00030	.00227
	.00082	.00020	-.00166	-.00748	.00010	.00033	.00250
Elem	Li6707	Sr4215	Sn1899	Ti3349	B_2496	2068/1	2068/2
Avg	.00033	.00001	.00106	.00075	.00220	-.01457	.00139
SDev	.00001	.00001	.00010	.00009	.00037	.00089	.00088
%RSD	2.1685	68.678	9.5207	12.486	16.917	6.0890	63.346
#1	.00032	.00001	.00108	.00066	.00262	-.01356	.00039
#2	.00033	.00000	.00115	.00085	.00204	-.01493	.00203
#3	.00032	.00002	.00095	.00075	.00193	-.01523	.00177
Elem	2203/1	2203/2	1960/1	1960/2	Si2881		
Avg	.00621	-.00038	-.01538	.00529	.09289		
SDev	.00225	.00098	.00228	.00058	.00015		
%RSD	36.175	259.00	14.795	11.039	.15868		
#1	.00734	.00061	-.01292	.00476	.09274		
#2	.00766	-.00136	-.01742	.00519	.09290		
#3	.00362	-.00039	-.01580	.00592	.09304		

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
/ e	--	90616	300435	--	--	--	--
Swey	--	59.07904	263.2914	--	--	--	--
%RSD	--	.0651974	.0876368	--	--	--	--
#1	--	90681	300721	--	--	--	--
#2	--	=90600	-300380	--	--	--	--

#3 -- 90566 300203 -- -- --

Method: MEIN1 Standard: CAL4D

Elem	A13082	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avg	.05200	.60764	1.8651	10.046	12.126	.70639	1.3017
SDev	.00024	.00032	.0009	.015	.015	.00052	.0007
ZRSD	.46327	.05300	.04599	.14689	.12372	.07393	.05435

#1	.05180	.60727	1.8650	10.029	12.109	.70583	1.3019
#2	.05193	.60785	1.8644	10.055	12.139	.70686	1.3023
#3	.05226	.60780	1.8661	10.054	12.130	.70647	1.3009

Elem	Cu3247	Fe2714	Mn2576	Mn3441	Ni2316	Ag3280	Tl1908
Avg	.35580	.03510	.50625	.30677	.36918	.06195	.51707
SDev	.00042	.00022	.00017	.00195	.00044	.00018	.00322
ZRSD	.11748	.63404	.03313	.63619	.11897	.29493	.62340

#1	.35547	.03517	.50606	.30571	.36875	.06176	.51351
#2	.35565	.03528	.50636	.30902	.36963	.06198	.51980
#3	.35627	.03485	.50633	.30557	.36917	.06212	.51789

Elem	V_2924	Zn2138	Li6707	Sr4215	2203/1	2203/2	1960/1
Avg	.21169	.19943	1.4184	1.7921	2.3563	2.0107	.81374
SDev	.00012	.00021	.0020	.0003	.0045	.0051	.00445
ZRSD	.05838	.10659	.13935	.01821	.19030	.25266	.54679

#1	.21155	.19921	1.4169	1.7924	2.3544	2.0048	.80861
#2	.21177	.19945	1.4176	1.7917	2.3531	2.0133	.81636
#3	.21176	.19963	1.4206	1.7921	2.3614	2.0139	.81626

Elem	1960/2
Avg	.45184
SDev	.00056
ZRSD	.12451

#1	.45210
#2	.45119
#3	.45222

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	92025	303295	--	--	--	--
SDev	--	90.41570	333.5731	--	--	--	--
ZRSD	--	.0982512	.1099830	--	--	--	--
#1	--	92035	303425	--	--	--	--
#2	--	91930	302916	--	--	--	--
#3	--	92110	303544	--	--	--	--

Method: MEIN1 Standard: CAL4

Elem	A13082	As1890	Ba4934	Cr2677	Co2286	Cu3247	Fe2714
Avge	.38770	6.0701	19.404	6.9252	13.062	3.5618	.33856
SDev	.00029	.0077	.025	.0007	.003	.0020	.00017
%RSD	.07478	.12618	.12631	.01034	.01965	.05632	.05145

#1	.38792	6.0775	19.430	6.9255	13.065	3.5617	.33840
#2	.38737	6.0707	19.402	6.9243	13.060	3.5599	.33854
#3	.38780	6.0622	19.381	6.9256	13.061	3.5639	.33874

Elem	Mn2576	Mn3441	Ni2316	Ag3280	Tl1908	V_2924	2203/1
Avge	4.7779	3.0355	3.6508	.62367	5.3698	2.0846	23.622
SDev	.0022	.0033	.0014	.00019	.0045	.0023	.028
%RSD	.04585	.10932	.03865	.02977	.08327	.10801	.11793

#1	4.7804	3.0317	3.6498	.62365	5.3650	2.0870	23.605
#2	4.7770	3.0368	3.6501	.62349	5.3739	2.0842	23.654
#3	4.7763	3.0380	3.6524	.62386	5.3705	2.0825	23.607

Elem	2203/2	1960/1	1960/2				
Avge	20.253	8.4008	4.5303				
SDev	.015	.0072	.0075				
%RSD	.07531	.08585	.16595				

#1	20.270	8.3930	4.5353				
#2	20.249	8.4072	4.5340				
#3	20.240	8.4021	4.5217				

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	88115	289531	--	--	--	--
SDev	--	40.55038	172.2005	--	--	--	--
%RSD	--	.0460200	.0594757	--	--	--	--
#1	--	88154	289720	--	--	--	--
#2	--	88073	289383	--	--	--	--
#3	--	88117	289490	--	--	--	--

Method: MEIN1 Standard: CAL2D

Elem	Mo2020	Sn1899	Ti3349	B_2496	Si2881		
Avge	1.0109	.23365	5.3092	1.7502	.78419		
SDev	.0012	.00068	.0039	.0036	.00115		
%RSD	.11443	.28981	.07278	.20430	.14644		

#1	1.0103	.23290	5.3056	1.7475	.78379		
#2	1.0101	.23382	5.3085	1.7488	.78330		
#3	1.0122	.23422	5.3133	1.7542	.78549		

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
E	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	90103	297485	--	--	--	--
SDev	--	268.7607	728.2694	--	--	--	--

ZRSD	--	.2982806	.2448085	--	--	--	--
#1	--	89793	296645	--	--	--	--
#2	--	90257	297933	--	--	--	--
#3	--	90260	297878	--	--	--	--

---

**Method: MEIN1      Standard: CAL1D**

Elem	2068/1	2068/2
Avg	1.4205	1.0205
SDev	.0047	.0045
ZRSD	.33034	.44188

#1	1.4152	1.0164
#2	1.4242	1.0199
#3	1.4222	1.0253

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	91930	303218	--	--	--	--
SDev	--	95.14200	369.1021	--	--	--	--
ZRSD	--	.1034940	.1217284	--	--	--	--
#1	--	92022	303574	--	--	--	--
#2	--	91936	303242	--	--	--	--
#3	--	91832	302837	--	--	--	--

---

**Method: MEIN1      Standard: CAL1**

Elem	2068/1	2068/2
Avg	14.721	10.397
SDev	.068	.005
ZRSD	.46101	.04624

#1	14.655	10.392
#2	14.718	10.397
#3	14.791	10.402

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	90322	298451	--	--	--	--
SDev	--	138.9328	498.9933	--	--	--	--
ZRSD	--	.1538189	.1671942	--	--	--	--
#1	--	90482	299019	--	--	--	--
#2	--	90256	298253	--	--	--	--
#3	--	90229	298082	--	--	--	--

---

**Method: MEIN1      Standard: CAL3**

Elem	Ca3179	Mg2790	K_7664	Na3302			
Avg	1.2078	.97214	1.7447	.34192			
SDev	.0009	.00041	.0037	.00030			
%D	.07688	.04195	.21443	.08693			
#1	1.2068	.97261	1.7491	.34225			
#2	1.2085	.97199	1.7424	.34181			
#3	1.2082	.97184	1.7427	.34167			
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88867	288748	--	--	--	--
SDev	--	238.0693	694.9750	--	--	--	--
%RSD	--	.2678939	.2406854	--	--	--	--
#1	--	88599	287958	--	--	--	--
#2	--	89054	289264	--	--	--	--
#3	--	88948	289023	--	--	--	--

Method: MEIN1                    Standard: CAL5

Elem	Al3082	Ca3179	Fe2714	Mg2790			
Avg	7.7230	2.3784	2.9883	2.0094			
SDev	.0164	.0008	.0021	.0035			
%PSD	.21199	.03529	.06912	.17371			
#1	7.7115	2.3776	2.9905	2.0068			
#2	7.7157	2.3785	2.9881	2.0081			
#3	7.7417	2.3792	2.9864	2.0134			
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	84538	276811	--	--	--	--
SDev	--	92.82420	253.0105	--	--	--	--
%RSD	--	.1098022	.0914020	--	--	--	--
#1	--	84433	276559	--	--	--	--
#2	--	84610	277065	--	--	--	--
#3	--	84570	276808	--	--	--	--

Method: MEIN1                    Slope = Conc(SIR)/IR

Element	Wavlen	High std	Low std	Slope	Y-intercept	Date	Standardized
Al3082	308.205	Multiple	Standards	27044.1	-447.171	08/28/97	09:36:48
Pb2203	220.353	NONE	NONE	1.00000	.000000	*08/28/97	09:36:48
Se1960	196.026	NONE	NONE	1.00000	.000000	*08/28/97	09:36:48
Sb2068	206.838	NONE	NONE	1.00000	.000000	*08/28/97	09:36:48
A_90	189.042	Multiple	Standards	1640.69	6.48168	08/28/97	08:47:05
Ba4934	493.409	Multiple	Standards	525.510	.133190	08/28/97	08:47:05

Element	Wavelength	High std	Low std	Slope	y-intercept	Date Standard
Be3130	313.042	Multiple	Standards	99.1237	4.20129	08/28/97 08:3
Cd2265	226.502	Multiple	Standards	82.4587	.261761	08/28/97 08:3
Ca3179	317.933	Multiple	Standards	83611.9	-280.170	08/28/97 09:3
Cr2677	267.716	Multiple	Standards	1430.53	-1.06906	08/28/97 08:4
Co2286	228.616	Multiple	Standards	766.973	-.155709	08/28/97 08:4
Cu3247	324.754	Multiple	Standards	2827.39	-11.8558	08/28/97 08:4
Fe2714	271.441	Multiple	Standards	30626.2	-23.2992	08/28/97 09:3
Hg2790	279.078	Multiple	Standards	101165.	7.66541	08/28/97 09:3
Mn2576	257.610	Multiple	Standards	2034.74	-2.09340	08/28/97 08:4
Mn3441	344.199	Multiple	Standards	3289.19	-7.15768	08/28/97 08:4
Ni2316	231.604	Multiple	Standards	2719.34	2.99862	08/28/97 08:4
K_7664	766.491	CAL3	BLANK	.864838	.000236	08/28/97 09:3
Ag3280	328.068	Multiple	Standards	1611.89	-.363198	08/28/97 08:4
Na3302	330.232	CAL3	BLANK	.873559	.002954	08/28/97 09:3
Tl1908	190.864	Multiple	Standards	1882.79	13.9231	08/28/97 08:4
V_2924	292.402	Multiple	Standards	4760.75	-.365601	08/28/97 08:4
Zn2138	213.856	CAL4D	BLANK	1.18413	.000105	08/28/97 09:3
Mo2020	202.030	Multiple	Standards	991.605	-2.37828	08/28/97 09:10
Li6707	670.784	CAL4D	BLANK	.759113	-.000148	08/28/97 09:3
Sr4215	421.552	Multiple	Standards	558.017	-.006811	08/28/97 08:29
Sn1899	189.989	Multiple	Standards	4299.42	-4.55480	08/28/97 09:1
Ti3349	334.941	Multiple	Standards	188.381	-.142063	08/28/97 09:10
B_2496	249.678	Multiple	Standards	572.093	-1.25838	08/28/97 09:10
2068/1	206.831	Multiple	Standards	687.549	10.1395	08/28/97 09:25
2068/2	206.832	Multiple	Standards	971.438	-1.26560	08/28/97 09:25
2203/1	220.351	Multiple	Standards	424.586	-2.61436	08/28/97 08:47
2203/2	220.352	Multiple	Standards	495.446	.219592	08/28/97 08:47
1960/1	196.021	Multiple	Standards	1196.99	18.4776	08/28/97 08:47
1960/2	196.022	Multiple	Standards	2223.69	-11.7039	08/28/97 08:47
Si2881	288.158	CAL2D	BLANK	1446.56	-134.377	08/28/97 09:36:4

Method: MEIN1

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
A13082	308.205	BLANK	.000000	.404096	-.404096
		CAL4D	1000.00	959.029	40.97
		CAL4	10000.0	10037.8	-37.7881
		CAL5	200940.	208413.	-7473.34

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2068	206.838	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	BLANK	.000000	-.030887	.030887
		CAL4D	1000.00	1003.43	-3.43195
		CAL4	10000.0	9965.68	34.3193
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	BLANK	.000000	.177506	-.177506
		CAL4D	1000.00	980.277	19.7229
		CAL4	10000.0	10197.2	-197.229
CorCoef: 0.99999					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	BLANK	.000000	.000000	-.000000
		CAL4D	1000.00	1000.00	.000000
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	BLANK	.000000	-.000000	.000000
		CAL4D	1000.00	1000.16	-.157715
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	BLANK	.000000	-3.53695	3.53695
		CAL3	100000.	100707.	-707.391
		CAL5	200000.	198585.	1414.78
CorCoef: 0.99997					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.716	BLANK	.000000	-.084968	.084968
		CAL4D	1000.00	1009.44	-9.44086
		CAL4	10000.0	9905.59	94.4092
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2236	228.616	BLANK	.000000	.016322	-.016322
		CAL4D	1000.00	998.194	1.80591
		CAL4	10000.0	10018.2	-18.2129
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.754	BLANK	.000000	.052927	-.052927
		CAL4D	1000.00	994.124	5.87561
		CAL4	10000.0	10058.9	-58.8564
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe2714	271.441	BLANK	.000000	-.542537	.542537
		CAL4D	1000.00	1051.66	-51.6598
		CAL4	10000.0	10345.5	-345.482
		CAL5	100130.	91498.0	8632.02
CorCoef: 0.99992					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg2790	279.078	BLANK	.000000	8.22686	-8.22686
		CAL3	100000.	98354.6	1645.37

<b>CorCoef:</b>	<b>0.99982</b>	<b>CAL5</b>	<b>200000.</b>	<b>203291.</b>	<b>-3290.75</b>
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
As2576	257.610	BLANK	.000000	-.252121	.252121
		CAL4D	1000.00	1028.00	-27.9965
		CAL4	10000.0	9719.70	280.305
<b>CorCoef:</b>	<b>0.99998</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
Mn3441	344.199	BLANK	.000000	-.018624	.018624
		CAL4D	1000.00	1001.85	-1.85333
		CAL4	10000.0	9977.15	22.8535
<b>CorCoef:</b>	<b>1.00000</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
Ni2316	231.604	BLANK	.000000	-.062379	.062379
		CAL4D	1000.00	1006.93	-6.93103
		CAL4	10000.0	9930.69	69.3096
<b>CorCoef:</b>	<b>1.00000</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Signal</b>	<b>Measured Signal</b>	<b>Residual Signal</b>
K_7664	766.491	BLANK	.001001	.000884	.000117
		CAL3	1.50915	1.74474	-.235587
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
Ag3280	328.068	BLANK	.000000	.004464	-.004464
		CAL4D	100.000	99.5000	.500046
		CAL4	1000.00	1004.92	-4.92047
<b>CorCoef:</b>	<b>1.00000</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Signal</b>	<b>Measured Signal</b>	<b>Residual Signal</b>
Na3302	330.232	BLANK	.001528	-.001633	.003161
		CAL3	.301641	.341920	-.040278
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
Tl1908	190.864	BLANK	.000000	.112304	-.112304
		CAL4D	1000.00	987.452	12.5482
		CAL4	10000.0	10124.1	-124.083
<b>CorCoef:</b>	<b>1.00000</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
V_2924	292.402	BLANK	.000000	-.067808	.067808
		CAL4D	1000.00	1007.45	-7.44916
		CAL4	10000.0	9923.81	76.1914
<b>CorCoef:</b>	<b>1.00000</b>				
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Signal</b>	<b>Measured Signal</b>	<b>Residual Signal</b>
Zn2138	213.856	BLANK	.000475	.000313	.000162
		CAL4D	.236252	.199428	.036824
<b>Element</b>	<b>Wavelength</b>	<b>Standard</b>	<b>Known Concentration</b>	<b>Measured Concentration</b>	<b>Residual Concentration</b>
Mo2020	202.030	BLANK	.000000	.000000	-.000000

CorCoef:	1.00000	CAL2D	1000.00	1000.00	.000000
Element Lib/07	Wavelength 670.784	Standard BLANK CAL4D	Known Signal .000099 1.07655	Measured Signal .000325 1.41836	Residual Signal -.000226 -.341813
Element Sr4215	Wavelength 421.552	Standard BLANK CAL4D	Known Concentration ,000000 1000.00	Measured Concentration -.000000 1000.000	Residual Concentration .000000 .000061
CorCoef:	1.00000				
Element Sn1899	Wavelength 189.989	Standard BLANK CAL2D	Known Concentration ,000000 1000.00	Measured Concentration ,000000 1000.00	Residual Concentration -.000000 .000000
CorCoef:	1.00000				
Element Ti3349	Wavelength 334.941	Standard BLANK CAL2D	Known Concentration ,000000 1000.00	Measured Concentration -.000000 1000.00	Residual Concentration .000000 .000000
CorCoef:	1.00000				
Element B_2496	Wavelength 249.678	Standard BLANK CAL2D	Known Concentration ,000000 1000.00	Measured Concentration ,000000 1000.00	Residual Concentration -.000000 -.000061
CorCoef:	1.00000				
Element 2068/1	Wavelength 206.831	Standard BLANK CAL1D CAL1	Known Concentration ,000000 1000.00 10000.0	Measured Concentration ,118591 986.823 10131.8	Residual Concentration -.118591 13.1768 -131.767
CorCoef:	1.00000				
Element 2068/2	Wavelength 206.832	Standard BLANK CAL1D CAL1	Known Concentration ,000000 1000.00 10000.0	Measured Concentration ,089088 990.101 10099.0	Residual Concentration -.089088 9.89862 -98.9863
CorCoef:	1.00000				
Element 2203/1	Wavelength 220.351	Standard BLANK CAL4D CAL4	Known Concentration ,000000 1000.00 10000.0	Measured Concentration ,021779 997.849 10026.9	Residual Concentration -.021779 2.15094 -26.8896
CorCoef:	1.00000				
Element 2203/2	Wavelength 220.352	Standard BLANK CAL4D CAL4	Known Concentration ,000000 1000.00 10000.0	Measured Concentration ,031726 996.391 10034.4	Residual Concentration -.031726 3.60938 -34.4092
CorCoef:	1.00000				
Element 1960/1	Wavelength 196.021	Standard BLANK CAL4D CAL4	Known Concentration ,000000 1000.00 10000.0	Measured Concentration ,067008 992.517 10074.1	Residual Concentration -.067008 7.48328 -74.0723

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentrati
1960/2	196.022	BLANK	.000000	.059382	-.059382
		CAL4D	1000.00	993.043	6.95697
		CAL4	10000.0	10062.4	-62.3896

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentratio
Si2881	288.158	BLANK	.000000	-.000005	.000005
		CAL2D	1000.00	1000.000	.000061

Method: MEIN1 Sample Name: ICV3

Operator:

Run Time: 08/28/97 09:49:39

Comment: ICV

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	2381.4	2356.4	02213.4	3.2351	2321.9	2447.9	2398.0
SDev	5.0	6.5	5.8	.4574	5.1	2.3	5.2
ZRSD	.21183	.27771	.26215	14.140	.21846	.09291	.21640

#1	2385.5	2349.1	02206.7	3.5722	2317.6	2450.4	2392.2
#2	2375.8	2358.6	02217.0	3.4186	2320.6	2446.0	2399.6
#3	2382.9	2361.6	02216.5	2.7143	2327.5	2447.2	2402.2

Errors	OC Pass	OC Pass	OC Fail	NOCHECK	OC Pass	OC Pass	OC Pass
Value	2500.0	2500.0	2500.0		2500.0	2500.0	2500.0
Range	10.400	10.400	10.400		10.400	10.400	10.400

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	2372.2	4966.0	2438.5	2417.1	2537.6	2299.6	4493.4
SDev	7.4	9.1	2.7	3.5	3.2	2.0	5.2
ZRSD	.31130	.18378	.11245	.14466	.12612	.08897	.11531

#1	2364.0	4955.4	2435.3	2413.0	2540.6	2301.6	4489.5
#2	2374.5	4971.7	2439.7	2418.9	2534.3	2299.6	4491.5
#3	2378.2	4970.7	2440.3	2419.3	2538.0	2297.6	4499.3

Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	2500.0		2500.0	2500.0	2500.0	2500.0	
Range	10.400		10.400	10.400	10.400	10.400	

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	2482.6	2472.0	2373.8	5017.5	237.91	5129.3	2363.2
SDev	2.5	3.8	4.1	16.7	.10	39.8	9.8
ZRSD	.10202	.15307	.17134	.33263	.04177	.77639	.41495

#1	2479.7	2472.0	2369.4	5035.6	238.02	5145.8	2351.9
#2	2483.9	2475.7	2374.5	5014.2	237.88	5158.1	2367.8
	2484.3	2468.1	2377.5	5002.7	237.84	5083.8	2369.8

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	2500.0	2500.0	2500.0		250.00		2500.0
Range	10.400	10.400	10.400		10.400		10.400

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2491.2	2353.5	1.9390	2687.2	2463.1	2.0010	.21587
SDev	1.6	6.2	.4273	9.2	1.7	.7761	.01481
%RSD	.06494	.26539	22.036	.34149	.06789	38.786	6.8613

#1	2489.4	2346.9	2.4312	2697.3	2465.0	2.2567	.22425
#2	2492.4	2354.5	1.7216	2679.3	2462.2	2.6171	.22460
#3	2491.9	2359.2	1.6641	2685.0	2462.1	1.1293	.19877

Errors	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	NOCHECK	NOCHECK
Value	2500.0	2500.0		2500.0	2500.0		
Range	10.400	10.400		10.400	10.400		

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1.3266	3.5595	3.0729	2351.5	2358.9	2191.1	2224.5
SDev	.1575	1.6963	.7122	3.4	11.1	8.7	11.1
%RSD	11.876	47.654	23.176	.14277	.47158	.39673	.49863

#1	1.2130	5.5138	2.6027	2354.9	2346.2	2194.5	2212.8
#2	1.5064	2.4695	3.8923	2348.2	2363.8	2181.2	2234.8
#3	1.2603	2.6951	2.7238	2351.3	2366.7	2197.6	2225.9

Errors	NOCHECK						
Value							
Range							

Elem	Si2881						
Units	ug/l						
Avg	3.5071						
SDev	1.9967						
%RSD	56.935						

#1	5.8127						
#2	2.3449						
#3	2.3636						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88786	291954	--	--	--	--
SDev	--	173.6462	559.8580	--	--	--	--
%RSD	--	.1955784	.1917624	--	--	--	--

#1	--	88625	291418	--	--	--	--
#2	--	88970	292535	--	--	--	--

#3 -- 88763 291909 -- -- --

Method: MEIN1 Sample Name: ICV3  
Run Time: 08/28/97 10:08:20  
Comment: ICV  
Mode: CONC Corr. Factor: 1

Operator:

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2508.8	2477.8	2513.0	1.6703	2489.9	2457.7	2489.6
SDev	4.7	4.6	3.0	.6327	2.8	2.8	2.1
ZRSD	.18819	.18436	.11980	.37.878	.11051	.11408	.08368

#1	2513.5	2472.8	2515.8	1.4237	2488.8	2460.3	2487.8
#2	2504.0	2479.0	2509.8	2.3891	2487.9	2457.9	2489.3
#3	2508.8	2481.7	2513.5	1.1981	2493.0	2454.8	2491.9

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass
Value	2500.0	2500.0	2500.0		2500.0	2500.0	2500.0
Range	10.400	10.400	10.400		10.400	10.400	10.400

Elem	Cd2265	Ca3179	Cr2677	Cu2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2458.9	5121.2	2448.1	2472.9	2502.4	2350.0	4783.4
SDev	4.3	15.1	3.3	3.1	4.1	7.4	7.1
ZRSD	.17650	.29548	.13627	.12412	.16542	.31381	.14923

#1	2454.9	5107.1	2444.5	2470.1	2507.2	2347.7	4778.6
#2	2458.3	5119.2	2448.9	2472.3	2500.3	2343.9	4779.9
#3	2463.5	5137.2	2451.0	2476.2	2499.7	2358.2	4791.6

Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	2500.0		2500.0	2500.0	2500.0	2500.0	
Range	10.400		10.400	10.400	10.400	10.400	

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2506.5	2489.4	2445.8	5250.9	246.19	4927.6	2489.8
SDev	2.2	4.1	3.2	17.0	.33	61.1	2.8
ZRSD	.08586	.16634	.13286	.32468	.13405	1.2396	.11115

#1	2504.2	2487.3	2442.6	5263.2	246.31	4872.3	2487.5
#2	2506.7	2486.6	2445.7	5231.5	245.82	4917.4	2492.9
#3	2508.5	2494.1	2449.1	5258.1	246.44	4993.2	2488.8

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	2500.0	2500.0	2500.0		250.00		2500.0
Range	10.400	10.400	10.400		10.400		10.400

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2487.8	2456.5	.69269	02799.9	2466.5	-.44754	.44446
SDev	1.0	2.4	.48452	10.4	1.3	.75778	.07889
ZRSD	.04203	.09782	.69.947	.37224	.05362	169.32	.17.749

#1	2487.0	2454.2	1.2256	02811.2	2467.7	-.15045	.39977
----	--------	--------	--------	---------	--------	---------	--------

#2	2487.3	2456.2	.27870	02790.7	2466.6	.11668	.53554
#3	2489.0	2459.0	.57378	02797.9	2465.1	-1.3089	.39806
Errors	OC Pass	OC Pass	NOCHECK	OC Fail.	OC Pass	NOCHECK	NOCHECK
Value	2500.0	2500.0		2500.0	2500.0		
Range	10.400	10.400		10.400	10.400		
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1.2899	1.9650	1.5230	2480.6	2476.4	2514.2	2512.4
SDev	.0973	.8139	1.3089	3.1	6.2	7.0	2.2
%RSD	7.5433	41.418	85.943	.12512	.24998	.28021	.08642
#1	1.2792	2.7102	.78125	2479.8	2469.3	2522.3	2512.6
#2	1.1984	1.0965	3.0344	2478.1	2479.5	2509.1	2510.2
#3	1.3921	2.0884	.75347	2484.1	2480.5	2511.3	2514.5
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	Si2881						
Units	ug/l						
Avg	2.2291						
SDev	1.5905						
%RSD	71.353						
#1	3.7778						
	.59978						
#3	2.3097						
Errors	NOCHECK						
Value							
Range							
In+Std	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	90522	297934	--	--	--	--
SDev	--	254.3823	709.4789	--	--	--	--
%RSD	--	.2810181	.2381326	--	--	--	--
#1	--	90228	297120	--	--	--	--
#2	--	90663	298419	--	--	--	--
#3	--	90674	298264	--	--	--	--

Method: MEIN1      Sample Name: ICV1      Operator:

Run Time: 08/28/97 10:16:55

Comment: ICV

Mode: CONC    Corr. Factor: 1

Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	19.326	-.69512	-1.1427	2571.4	-.01378	.94273	.64698
SDev	1.083	.31982	.6120	2.7	1.50503	.00679	.14282

%RSD	5.6025	46.010	53.560	.10457	10921.	.72071	22.076
#1	20.484	-.87215	-1.4715	2574.4	-1.5543	.95045	.81184
#2	19.153	-.32593	-1.5199	2570.9	.05995	.93767	.56086
#3	18.340	-.88730	-.43653	2569.1	1.4530	.94007	.56823
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK
Value				2500.0			
Range				10.400			
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.46072	49889.	.50882	-.07447	.69708	.64059	48814.
SDev	.10209	66.	.54016	.40349	.14017	1.1995	33.
%RSD	22.159	.13153	106.16	541.78	20.108	187.25	.06695
#1	.56577	49816.	1.1306	.39143	.65083	.60487	48780.
#2	.45452	49910.	.24001	-.31035	.58589	-.54064	48845.
#3	.36188	49942.	.15581	-.30450	.85453	1.8575	48818.
Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pass
Value		50000.					50000.
Range		10.400					10.400
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.02249	-.30393	.18306	54131.	-.22042	50976.	1.8890
SDev	.05093	7.01345	.25041	88.	.06651	84.	.3091
%RSD	226.43	2307.6	136.79	.16210	30.174	.16402	16.364
#1	.07612	7.5111	.17308	54066.	-.14662	50882.	1.5400
#2	-.02522	-2.3724	-.06221	54231.	-.27573	51003.	1.9987
#3	.01658	-6.0505	.43831	54096.	-.23892	51042.	2.1284
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	OC Pass	NOCHECK
Value				50000.		50000.	
Range				10.400		10.400	
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.56713	1.2526	2544.8	1.5716	.80637	2624.6	2523.3
SDev	.16840	.0233	4.7	.0925	.03230	2.3	2.5
%RSD	29.693	1.8631	.18599	5.8834	4.0060	.08792	.10005
#1	.73871	1.2261	2539.9	1.4841	.84357	2622.0	2520.4
#2	.40210	1.2700	2549.3	1.5624	.79022	2625.4	2524.4
#3	.56059	1.2616	2545.3	1.6683	.78534	2626.4	2525.2
Errors	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	OC Pass	OC Pass
Value			2500.0			2500.0	
Range			10.400			10.490	10.400
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	2591.6	2574.4	2569.9	.07210	-1.0784	.12849	-1.7774
SDev	3.4	6.1	6.0	.91017	.6393	.50556	.7282
%RSD	.12948	.23682	.23532	1262.3	59.283	393.47	40.968

#1	2588.1	2569.3	2576.9	.96059	-1.7874	.21106	-2.3117
#2	2594.8	2581.2	2565.8	.11402	-.54580	-.41327	-2.0726
	2591.7	2572.8	2567.2	-.85829	-.90201	.58768	-.94801

Errors	0	C Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.0							
Range	10.400							

Elem	Si2881
Units	ug/l
Avg	2630.4
SDev	1.7
%RSD	.06399

#1	2629.0
#2	2632.3
#3	2630.0

Errors NOCHECK  
Value  
Range

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgae	--	87626	288441	--	--	--	--
$\Sigma v$	--	286.6583	906.8960	--	--	--	--
%nsD	--	.3271385	.3144126	--	--	--	--
#1	--	87307	287426	--	--	--	--
#2	--	87709	288727	--	--	--	--
#3	--	87862	289171	--	--	--	--

etc.: MEIN1      Sample Name: BLANK

**Operator:**

Run Time: 08/28/97 10:25:29

Comment: ICB

Code: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-6.7475	-.13919	-1.0522	1.3867	-.20573	.21883	.01630
SDev	3.7746	.84183	1.6467	.6778	.23643	.01805	.14640
%RSD	55.941	604.82	156.50	48.879	114.93	8.2479	897.97

#1	-2.3926	-.38687	-2.6463	1.8072	-.47591	.19947	.18184
#2	-8.7686	-.82939	.64242	.60478	-.10459	.23519	-.03675
#3	-9.0811	.79870	-1.1526	1.7482	-.03668	.22183	-.09617

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000

Avg	-.02249	.62010	.01173	.00344	.09023	-2.0848	9.9975
SDev	.06798	.75537	.45066	.36588	.01915	2.4994	1.8358
%RSD	302.30	121.81	3843.0	10650.	21.228	119.89	18.363
#1	-.10012	.66578	.28220	-.16481	.07188	-3.4362	10.356
#2	.02640	-.15707	-.50852	-.24806	.11010	-3.6175	11.627
#3	.00625	1.3516	.26150	.42318	.08871	.79942	8.0088
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.26847	-1.6684	-.09585	-16.070	-.38000	21.044	1.1286
SDev	.03011	6.2059	.42361	28.678	.24371	84.157	.6025
%RSD	11.216	371.98	441.93	178.46	64.135	399.92	53.385
#1	-.28255	1.3385	-.55659	-.78302	-.25706	22.621	.43655
#2	-.23390	-8.8050	.27677	-49.153	-.66069	-63.892	1.4127
#3	-.28896	2.4614	-.00774	1.7266	-.22225	104.40	1.5364
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.22636	-.76255	1.3028	.37950	.03874	-.43642	.24950
SDev	.23650	.00712	.5639	.07040	.02215	2.92561	.10027
%RSD	104.48	.93329	43.288	18.551	57.166	670.37	40.187
#1	-.20806	-.75544	1.2059	.42713	.05430	2.6304	.34425
#2	-.47148	-.76967	.79351	.29863	.01338	-3.1967	.25976
#3	.00045	-.76254	1.9088	.41273	.04854	-.74298	.14450
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	2.0881	1.7140	1.2232	-1.5366	.55831	-4.0093	.42404
SDev	.5228	.8695	1.4421	2.1614	.76885	1.6432	2.5903
%RSD	25.039	50.725	117.89	140.56	137.71	40.984	610.87
#1	2.6193	.99376	2.2131	-.57923	-.29100	-2.9980	-2.4709
#2	2.0709	2.6799	-.43134	-4.0114	.75905	-3.1246	2.5230
#3	1.5741	1.4685	1.8877	-.01922	1.2069	-5.9052	1.2200
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.00000						
Range	100.00						
F'ns	Si2881						
ts	ug/l						
Avg	-.87102						

SDev 1.15803  
%RSD 132.95

.42431  
#2 -1.2312  
#3 -1.8061

Errors NOCHECK  
Value  
Range

	1	2	3	4	5	6	7
IntStd	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgc	--	91432	302540	--	--	--	--
SDev	--	450.0237	1348.967	--	--	--	--
%RSD	--	.4921932	.4458811	--	--	--	--
#1	--	91021	301298	--	--	--	--
#2	--	91913	303975	--	--	--	--
#3	--	91363	302346	--	--	--	--

Method: MEIN1 Sample Name: ICSA

Operator:

Run Time: 08/28/97 10:34:02

Comment: ICSA

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	484930.	-1.7608	-10.316	2.9594	-5.0893	10.130	.96822
SDev	311.	1.0707	3.697	2.9838	.7769	.028	.18405
%RSD	.06418	60.809	35.839	100.82	15.265	.27567	19.009
#1	484610.	-2.6639	-13.203	3.8761	-4.4191	10.131	1.1782
#2	484950.	-2.0406	-11.598	5.3773	-4.9081	10.158	.89156
#3	485230.	-.57798	-6.1489	-.37517	-5.9408	10.102	.83490

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500000.						
Range	20.000						

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	5.2851	455670.	.97092	3.6191	2.4979	176700.	489070.
SDev	.2202	1377.	.71955	.3003	.0890	174.	.928.
%RSD	4.1660	.30222	74.110	8.2974	3.5640	.09875	.18966
#1	5.0864	454470.	1.7987	3.9658	2.4804	176590.	488100.
#2	5.2472	455350.	.61903	3.4510	2.5944	176610.	489170.
#3	5.5218	457170.	.49505	3.4404	2.4189	176900.	489940.

Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	OC Pass	OC Pass
Value		500000.				200000.	500000.
Range		20.000				20.000	20.000

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1.9546	-3.2033	-67322	-10.027	-11478	370.22	-14.168
SDev	.0474	12.1908	.38616	28.174	.29327	53.18	1.806
ZRSD	2.4260	380.58	57.360	280.97	255.51	14.365	12.749

#1	1.9497	10.860	-1.1173	22.177	.22071	424.68	-16.214
#2	1.9098	-9.6967	-41666	-22.139	-24261	318.41	-12.796
#3	2.0043	-10.773	-48567	-30.120	-32244	367.58	-13.493

Errors	NOCHECK						
Value							
Range							

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-7.2103	26.865	3.4422	1.7063	31.781	-6.3957	-2.5293
SDev	.3270	.105	2.2219	.1340	.085	4.5771	.0253
ZRSD	4.5351	.39050	64.549	7.8562	.26588	71.565	.99922

#1	-6.6371	26.784	5.9876	1.8543	31.874	-1.2000	-2.540
#2	-7.3469	26.983	2.4480	1.6716	31.758	-9.8320	-2.5004
#3	-7.4467	26.828	1.8910	1.5930	31.710	-8.1552	-2.5470

Errors	NOCHECK						
Value							
Range							

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	-11.499	-2.0832	5.4768	23.360	-14.303	-24.298	-3.3362
SDev	.561	4.2180	4.0966	2.939	2.707	3.054	4.0186
ZRSD	4.8827	202.48	74.801	12.579	18.924	12.568	120.45

#1	-11.059	-5.8452	8.7293	26.660	-17.304	-26.700	-6.4642
#2	-11.307	2.4769	6.8251	21.026	-13.557	-25.333	-4.7405
#3	-12.131	-2.8813	.87588	22.395	-12.047	-20.861	1.1961

Errors	NOCHECK						
Value							
Range							

Elem	Si2881						
Units	ug/l						
Avg	31.092						
SDev	.714						
ZRSD	2.2961						

#1	31.913						
#2	30.618						
#3	30.744						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Flem	--	Sc	Y	--	--	--	--
Len	--	361.384	371.030	--	--	--	--
Avg	--	79532	259610	--	--	--	--
SDev	--	192.1571	594.7548	--	--	--	--
%RSD	--	.2416108	.2290958	--	--	--	--
#1	--	79310	258923	--	--	--	--
#2	--	79651	259963	--	--	--	--
#3	--	79634	259943	--	--	--	--

Method: MEIN1      Sample Name: ICSAB      Operator:

Run Time: 08/28/97 10:42:34

Comment: ICSAB

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	486650.	950.17	-7.9189	3.6302	-4.8806	522.87	488.76
SDev	284.	1.53	1.6156	1.1548	1.0576	.11	.40
%RSD	.05827	.16121	20.401	31.810	21.670	.02034	.08224
#1	486440.	948.59	-9.6199	3.6129	-6.0025	522.85	489.22
#2	486970.	951.65	-7.7316	2.4842	-4.7373	522.77	488.60
#3	486530.	950.27	-6.4051	4.7936	-3.9019	522.98	488.46

Errors	OC Pass	OC Pass	NOCHECK	NOCHECK	NOCHECK	OC Pass	OC Pass
Value	500000.	1000.0				500.00	500.00
Range	20.000	20.000				20.000	20.000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	929.33	451140.	475.01	474.52	577.36	174630.	486560.
SDev	.28	754.	.42	.25	.47	63.	523.
%RSD	.02972	.16708	.08846	.05236	.08057	.03600	.10746
#1	929.60	450370.	475.39	474.76	577.88	174580.	486020.
#2	929.04	451190.	475.08	474.53	577.21	174620.	486590.
#3	929.34	451870.	474.55	474.26	576.98	174700.	487070.

Errors	OC Pass						
Value	1000.0	500000.	500.00	500.00	500.00	200000.	500000.
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	491.47	474.12	913.07	-16.011	1086.7	334.73	-13.419
SDev	.62	15.96	.49	29.323	.2	28.79	1.403
%RSD	.12644	3.3670	.05416	183.14	.01433	8.6009	10.452

#1	490.88	492.55	913.01	16.940	1086.5	323.86	-15.035
#2	491.42	465.42	912.61	-25.741	1086.8	367.38	-12.705
#3	492.12	464.41	913.60	-39.232	1086.8	312.96	-12.517

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	NOCHECK

Value	500.00	500.00	1000.0		1000.0		
Range	20.000	20.000	20.000		20.000		
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	483.84	1044.3	3.1796	1.3450	31.883	-2.1584	-2.4788
SDev	.67	.3	1.9043	.1083	.046	4.4238	.0314
%RSD	.13782	.02888	59.891	8.0515	.14291	204.95	1.2648
#1	484.46	1044.0	5.1339	1.4614	31.933	2.9487	-2.4569
#2	483.13	1044.6	1.3296	1.3265	31.873	-4.8000	-2.4648
#3	483.95	1044.2	3.0753	1.2472	31.844	-4.6239	-2.5148

Errors	OC Pass	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00	1000.0					
Range	20.000	20.000					
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	-11.284	.60803	5.1389	965.62	942.45	-19.009	-2.382
SDev	.376	4.7313	2.5538	.72	2.66	6.692	1.398
%RSD	3.3355	778.14	49.695	.07506	.28180	35.202	58.699
#1	-10.865	-4.6973	7.7616	966.32	939.74	-24.416	-2.2332
#2	-11.593	2.1314	2.6602	964.87	945.05	-21.086	-1.0643
#3	-11.394	4.3901	4.9949	965.69	942.57	-11.525	-3.8490

Errors	NOCHECK						
Value							
Range							

Elem	Si2881						
Units	ug/l						
Avg	31.099						
SDev	1.556						
%RSD	5.0042						
#1	32.896						
#2	30.178						
#3	30.223						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	78332	255739	--	--	--	--
SDev	--	188.6169	532.8427	--	--	--	--
%RSD	--	.2407926	.2083544	--	--	--	--
#1	--	78114	255126	--	--	--	--
#2	--	78447	256094	--	--	--	--
#3	--	78434	255996	--	--	--	--

Method: MEIN1      Sample Name: CRI  
R Time: 08/28/97 10:53:53

Operator:

Comment: CRI

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1690	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	401.19	5.6278	9.4069	122.11	18.641	387.37	9.9007
SDev	1.66	.4944	.8307	.57	1.608	.25	.1175
%RSD	.41291	8.7849	8.8311	.46734	8.6259	.06365	1.1868

#1	402.50	6.0312	10.081	122.40	17.881	387.13	10.035
#2	401.75	5.7759	8.4788	121.45	17.553	387.62	9.8480
#3	399.33	5.0763	9.6612	122.48	20.487	387.35	9.8187

Errors	OC Pass						
Value	400.00	6.0000	10.000	120.00	20.000	400.00	10.000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	9.8104	10217.	19.748	97.338	49.598	184.50	9702.4
SDev	.1365	21.	.247	.058	.132	2.89	13.5
%RSD	1.3915	.21012	1.2517	.05955	.26562	1.5687	.13909

#1	9.8104	10209.	19.960	97.321	49.543	181.72	9694.3
#2	9.6740	10201.	19.477	97.289	49.502	184.28	9694.8
#3	9.9470	10242.	19.809	97.402	49.748	187.49	9718.0

Errors	OC Pass						
Value	10.000	10000.	20.000	100.00	50.000	200.00	10000.
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	29.285	27.632	78.907	10182.	19.678	9682.6	19.650
SDev	.039	5.051	.737	8.	.174	101.5	2.550
%RSD	.13248	18.281	.93377	.07396	.88524	1.0485	12.978

#1	29.240	31.894	78.532	10189.	19.879	9750.8	16.705
#2	29.303	022.053	78.433	10174.	19.577	9566.0	21.141
#3	29.312	28.949	79.755	10182.	19.578	9731.1	21.103

Errors	OC Pass						
Value	30.000	30.000	80.000	10000.	20.000	10000.	20.000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	98.312	38.712	101.76	78.222	59.792	203.93	99.995
SDev	.268	.104	.46	.012	.040	2.50	.025
%RSD	.27216	.26871	.45217	.01513	.06733	1.2272	.02532

#1	98.157	38.674	101.26	78.224	59.826	201.28	99.989
#2	98.158	38.633	101.86	78.210	59.802	206.26	99.974

#3	98.621	38.830	102.16	78.233	59.747	204.25	100.02
Errors	0C Pass	0C Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	100.00	40.000					
Range	20.000	20.000					
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	205.85	121.50	122.42	4.6167	6.1324	8.2149	10.002
SDev	.73	1.33	.44	1.2594	.3190	1.5786	.576
%RSD	.35621	1.0982	.35825	27.280	5.2020	19.216	5.7572
#1	205.92	122.79	122.21	5.9852	6.0540	8.9646	10.638
#2	205.09	120.13	122.12	4.3587	6.4833	6.4012	9.5159
#3	206.55	121.60	122.92	3.5062	5.8599	9.2788	9.8521
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	Si2881						
Units	ug/l						
Avg	210.34			—			
SDev	.43						
%RSD	.20473						
#1	209.95						
#2	210.80						
#3	210.27						
Errors	NOCHECK						
Value							
Range							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	91417	300853	--	--	--	--
SDev	--	173.9310	571.8243	--	--	--	--
%RSD	--	.1902611	.1900677	--	--	--	--
#1	--	91223	300240	--	--	--	--
#2	--	91559	301372	--	--	--	--
#3	--	91469	300947	--	--	--	--

Method: MEIN1      Sample Name: CCV4

Operator:

Run Time: 08/28/97 11:02:37

Comment: CCV

Mode: CONC    Corr. Factor: 1

ELEM	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	989.33	997.84	999.31	.85132	1006.1	988.05	1008.8
S.D.	4.24	1.90	3.08	.83754	2.6	1.06	1.1
%RSD	.42854	.19006	.30853	98.381	.25415	.10731	.11106

#1	989.54	995.68	996.73	-.06637	1003.2	989.27	1008.0
#2	993.46	999.22	998.47	1.5745	1007.5	987.57	1008.4
	984.99	998.62	1002.7	1.0459	1007.6	987.32	1010.1
Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass
Value	1000.0	1000.0	1000.0		1000.0	1000.0	1000.0
Range	10.490	10.490	10.490		10.490	10.490	10.490
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	998.13	18.878	1004.3	994.12	1007.4	961.73	11.958
SDev	1.70	.586	1.9	1.33	2.1	3.82	1.776
%RSD	.17072	3.1045	.19184	.13395	.20797	.39739	14.849
#1	996.32	19.453	1002.1	992.58	1008.8	961.49	13.304
#2	998.36	18.281	1005.3	994.82	1008.3	965.67	12.624
#3	999.70	18.901	1005.4	994.94	1005.0	958.04	9.9456
Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	1000.0		1000.0	1000.0	1000.0	1000.0	
Range	10.490		10.490	10.490	10.490	10.490	
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	T11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	1021.7	1008.6	1005.1	1.8040	99.488	107.45	982.42
SDev	1.2	1.1	1.2	16.006	.195	46.04	2.64
%RSD	.11768	.11178	.11777	887.30	.19588	42.849	.26877
#1	1020.3	1009.7	1003.7	18.990	99.709	151.08	980.36
#2	1022.2	1008.7	1005.4	-.89867	99.416	59.328	981.51
#3	1022.5	1007.4	1006.0	-12.679	99.340	111.93	985.40
Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	1000.0	1000.0	1000.0		100.00		1000.0
Range	10.490	10.490	10.490		10.490		10.490
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	1006.0	995.96	.40825	1008.5	998.93	-.25041	.07861
SDev	.7	1.47	.52506	3.8	.55	1.59587	.01992
%RSD	.06624	.14711	128.61	.38131	.05482	637.30	25.335
#1	1005.3	994.27	.56848	1011.2	999.55	-.42774	.05643
#2	1006.2	996.82	-.17825	1010.2	998.68	-1.7502	.09496
#3	1006.6	996.79	.83454	1004.1	998.55	1.4267	.08444
Errors	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	NOCHECK	NOCHECK
Value	1000.0	1000.0		1000.0	1000.0		
Range	10.490	10.490		10.490	10.490		
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avge	1.0268	1.0567	.74863	1000.1	996.73	998.59	999.67
SDev	.1647	.5700	1.5259	2.1	3.69	1.46	5.34
%RSD	16.043	53.935	203.82	.20752	.36994	.14603	.53398

#1	1.2163	1.5710	-.88396	1002.1	992.47	999.55	995.32
#2	.91830	.44397	2.1387	1000.2	998.75	999.30	998.06
#3	.94569	1.1552	.99115	997.95	998.96	996.91	1005.6
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value Range							

Ele~~m~~ Si2881  
 Units ug/l  
 Avge .39477  
 SDev 1.0058  
 %RSD 254.77

#1	1.4302
#2	.33249
#3	-.57840

Errors NOCHECK  
 Value Range

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Ele <del>m</del>	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	91745	302241	--	--	--	--
SDev	--	246.5137	751.7156	--	--	--	--
%RSD	--	.2686944	.2487137	--	--	--	--
--	--	91462	301382	--	--	--	--
#2	--	91860	302565	--	--	--	--
#3	--	91913	302777	-	--	--	--

Method: MEIN1      Sample Name: CCV123

Operator:

Run Time: 08/28/97 11:11:09

Comment: CCV

Mode: CONC    Corr. Factor: 1

Ele <del>m</del>	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	6.4013	1.6041	-.62378	985.75	-4.1747	.56429	.50260
SDev	4.2418	.8606	1.03591	2.82	.8655	.01594	.18397
%RSD	66.264	53.650	166.07	.28604	20.732	2.8251	36.604
#1	11.297	1.2111	-.94821	986.73	-3.4846	.58270	.71357
#2	4.0723	1.0102	.53552	982.57	-3.8937	.55474	.41868
#3	3.8343	2.5910	-1.4586	987.95	-5.1457	.55544	.37556
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass 1000.0 10.490	NOCHECK	NOCHECK	NOCHECK
Value Range							
Ele <del>m</del>	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	-.04386	49201.	1.4727	.15118	.57264	26.722	46176.

SDev	.05664	145.	.1250	.21043	.18993	2.059	42.
%RSD	129.14	.29404	8.4856	139.19	33.168	7.7045	.09007
#1	-.07599	49066.	1.6168	.38138	.75610	25.012	46173.
#2	.02154	49184.	1.4074	-.03125	.58497	26.147	46136.
#3	-.07714	49354.	1.3939	.10340	.37684	29.008	46219.
Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pass
Value		50000.					50000.
Range		10.490					10.490
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.19925	2.5961	-1.9123	51842.	-.10199	48690.	-.5.7111
SDev	.02628	6.5384	.3530	74.	.18572	123.	.9850
%RSD	13.188	251.85	18.461	.14324	182.09	.25321	17.247
#1	-.20883	9.0813	-1.9176	51928.	.07059	48805.	-4.5742
#2	-.21940	-3.9941	-2.2626	51792.	-.29853	48560.	-6.3059
#3	-.16953	2.7011	-1.5566	51807.	-.07804	48706.	-6.2533
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	OC Pass	NOCHECK
Value				50000.		50000.	
Range				10.490		10.490	
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.00255	.12405	1024.8	.82501	3.0626	1034.1	1016.7
SDev	.06263	.03592	5.1	.08428	.0342	2.7	1.0
%RSD	2454.0	28.956	.50243	10.216	1.1175	.26156	.09508
#1	.03585	.14934	1019.2	.76789	3.1017	1033.4	1015.6
#2	.03132	.13987	1025.7	.78535	3.0480	1031.8	1017.2
#3	-.07482	.08294	1029.4	.92181	3.0381	1037.0	1017.3
Errors	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	OC Pass	OC Pass
Value			1000.0			1000.0	
Range			10.490			10.490	10.490
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	979.64	982.15	987.55	4.5787	.11887	-15.815	6.9602
SDev	.88	3.38	3.48	1.0787	1.1437	3.014	.0494
%RSD	.08961	.34418	.35202	23.558	962.12	19.060	.70970
#1	980.52	979.89	990.14	5.3619	-.86140	-16.782	6.9567
#2	978.76	980.52	983.60	3.3484	-.15733	-12.436	7.0112
#3	979.63	986.03	988.91	5.0257	1.3753	-18.227	6.9126
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1000.0						
Range	10.490						
Elem	Si2881						
Units	ug/l						
Avg	990.83						
SDev	1.61						

ZRSD .16214

#1 992.04  
#2 989.01  
#3 991.45

Errors NOCHECK  
Value  
Range

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	87502	287294	--	--	--	--
SDev	--	250.3165	789.6432	--	--	--	--
ZRSD	--	.2860683	.2748558	--	--	--	--
#1	--	87224	286425	--	--	--	--
#2	--	87709	287968	--	--	--	--
#3	--	87574	287488	--	--	--	--

Method: MEIN1 Sample Name: BLANK

Run Time: 08/28/97 11:19:42

Comment: CCB

Mode: CONC Corr. Factor: 1

Operator:

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-16.239	-.45273	-1.0420	1.9099	.38546	.28709	-.08997
SDev	2.075	.32854	1.0562	.8029	.84530	.00561	.12444
ZRSD	12.775	72.568	101.36	42.038	219.30	1.9556	138.32
#1	-13.876	-.77754	-1.5316	1.2747	1.2101	.28418	.05355
#2	-17.760	-.46007	-1.7644	1.6427	-.47908	.29356	-.16794
#3	-17.082	-.12059	.17018	2.8123	.42536	.28353	-.15552
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.06965	10.144	.16131	.10500	-.04104	-1.4789	17.213
SDev	.08265	1.409	.64834	.32514	.16446	3.0876	1.132
ZRSD	118.66	13.887	401.93	309.64	400.73	208.78	6.5741
#1	-.02476	9.4743	.90462	.47163	.12380	2.0864	15.966
#2	.12893	9.1944	-.28754	-.14833	-.04181	-3.2731	17.499
#3	.10480	11.762	-.13316	-.00829	-.20511	-3.2500	18.174
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
E..	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	T11908

Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.19186	.69728	.33062	-3.9548	-.00493	50.326	1.2446
SDev	.01582	9.7464	.19269	34.7711	.24795	129.14	1.5672
SD	8.2480	1397.8	58.283	879.20	5029.2	256.61	125.92

#1	-.20647	11.929	.41832	36.195	.20945	194.53	2.7519
#2	-.17505	-5.5376	.46385	-24.220	-.27647	11.095	-.37631
#3	-.19407	-4.2993	.10967	-23.840	.05223	-54.652	1.3583

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.04133	-.74799	.92492	.26526	.09902	-.69627	.36939
SDev	.10703	.03078	.61488	.10063	.03285	1.76028	.02752
%RSD	258.97	4.1145	66.479	37.935	33.178	252.81	7.4511

#1	-.00266	-.72720	1.5775	.38051	.13515	1.2902	.39814
#2	.04099	-.73343	.84085	.22039	.07094	-2.0624	.36674
#3	-.16233	-.78335	.35641	.19487	.09096	-1.3166	.34328

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.000

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1.2414	1.0306	2.3488	-1.0148	-.17230	-3.3497	.11009
SDev	.1984	.6761	1.2886	.5288	.36140	2.0649	1.0399
%RSD	15.980	65.603	54.860	52.108	209.74	61.643	944.59

#1	1.4702	.53023	1.6462	-1.6057	-.36425	-2.6663	-.96529
#2	1.1378	1.7997	1.5643	-.58627	-.39723	-5.6697	.18521
#3	1.1163	.76174	3.8360	-.85232	.24457	-1.7132	1.1103

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.00000						
Range	100.00						

Elem	Si2881						
Units	ug/l						
Avg	-2.8094						
SDev	.6280						
%RSD	22.353						

#1	-2.1019						
#2	-3.0256						
#3	-3.3008						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-

Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgc	--	93090	307301	--	--	--	--
SDev	--	304.4837	908.8577	--	--	--	--
ZRSD	--	.3270842	.2957546	--	--	--	--
#1	--	92749	306280	--	--	--	--
#2	--	93334	308021	--	--	--	--
#3	--	93188	307603	--	--	--	--

Method: MEIN1      Sample Name: PBW 08269704P      Operator:  
Run Time: 08/28/97 11:28:14  
Comment: PBW 08269704P  
Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	15.148	.94505	-2.9235	.47260	-1.8050	.32965	.13350
SDev	1.862	.17252	.6104	.36481	.8748	.03154	.10980
ZRSD	12.291	18.255	20.880	77.193	48.463	9.5670	82.244
#1	17.114	1.0777	-2.6542	.05347	-1.5082	.30597	.26045
#2	13.411	.75003	-2.4940	.71872	-1.1173	.31752	.06928
#3	14.921	1.0074	-3.6223	.64559	-2.7896	.36545	.07103
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	.02444	12.689	.22163	.01258	4.8494	9.9228	10.515
SDev	.03570	.421	.19634	.11546	.2030	2.1820	1.676
ZRSD	146.08	3.3205	88.589	917.65	4.1868	21.990	15.937
#1	.01924	13.163	.40767	.01587	5.0534	12.435	9.3919
#2	-.00838	12.546	.01640	-.10448	4.6474	8.8365	9.7127
#3	.06245	12.358	.24082	.12636	4.8474	8.4971	12.442
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	.84962	.92942	.11989	18.925	.00319	136.46	-.31090
SDev	.02944	2.1016	.22947	15.779	.12211	35.72	.61777
ZRSD	3.4655	226.12	191.40	83.377	3829.8	26.179	198.70
#1	.82942	3.3297	.16086	36.636	-.03785	171.86	-.80292
#2	.83602	.03879	-.12731	6.3647	.14053	100.42	-.51219
#3	.88340	-.58022	.32612	13.775	-.09312	137.10	.38241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000

Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem Units	V_2924 ug/l	Zn2138 ug/l	Mo2020 ug/l	Li6707 ug/l	Sr4215 ug/l	Sn1899 ug/l	Ti3349 ug/l
Avg	.18631	6.2886	.47266	.38564	.06087	.15538	.13269
SDev	.03327	.0413	.49950	.03457	.00879	2.4166	.08063
%RSD	17.858	.65707	105.68	8.9652	14.437	1555.3	60.764
#1	.22473	6.2410	1.0266	.42393	.06864	-2.0449	.16452
#2	.16670	6.3109	.05649	.37626	.05133	2.7417	.04101
#3	.16751	6.3140	.33492	.35672	.06265	-.23070	.19255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	1000.0	1000.0	1000.0	1000.0
Low	-50.000	-20.000	-50.000	-1000.0	-1000.0	-1000.0	-1000.0
Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avg	9.6056	1.2366	.09103	.75083	1.0419	-6.8123	-.98217
SDev	.2415	.2293	.44156	.16808	.1754	.7771	1.25454
%RSD	2.5145	18.544	485.04	22.386	16.832	11.408	127.73
#1	9.5009	.99921	-.41881	.86476	1.1839	-6.6261	-.67142
#2	9.4341	1.4569	.35006	.55779	.84584	-7.6656	.08778
#3	9.8818	1.2537	.34185	.82993	1.0958	-6.1451	-2.3629
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	1000.0						
Low	-1000.0						
Elem Units	Si2881 ug/l						
Avg	110.96						
SDev	.19						
%RSD	.17196						
#1	110.75						
#2	111.13						
#3	111.00						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	89422	295971	--	--	--	--
SDev	--	263.1426	827.8408	--	--	--	--
%RSD	--	.2942705	.2797030	--	--	--	--
#1	--	89120	295017	--	--	--	--
#2	--	89602	296496	--	--	--	--
#3	--	89544	296401	--	--	--	--

Method: MEIN1      Sample Name: LCSW 08269704P      Operator:  
 Run Time: 08/28/97 11:36:47  
 Comment: LCSW 08269704P  
 Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	5060.3	4926.9	4874.7	5019.8	4924.6	4972.0	4963.1
SDev	4.6	13.1	7.5	13.6	2.4	6.5	12.2
%RSD	.09057	.26491	.15455	.27056	.04888	.13141	.24612
#1	5060.1	4911.9	4870.6	5004.2	4921.8	4979.5	4949.3
#2	5065.0	4933.3	4883.4	5026.3	4926.0	4969.2	4967.5
#3	5055.9	4935.6	4870.1	5028.9	4926.0	4967.4	4972.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.0	6000.0	6000.0	6000.0	6000.0	6000.0	6000.0
Low	4000.0	4000.0	4000.0	4000.0	4000.0	4000.0	4000.0
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	4850.5	10170.	4877.1	4903.1	5087.0	4703.6	9600.2
SDev	7.4	35.	8.2	6.5	4.7	16.2	20.4
%RSD	.15170	.34129	.16753	.13340	.09212	.34403	.21265
#1	4842.0	10130.	4868.0	4895.6	5092.1	4687.5	9576.7
#2	4854.0	10190.	4883.8	4906.7	5085.9	4719.8	9613.9
#3	4855.4	10190.	4879.6	4907.2	5082.9	4703.6	9610.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.0	12000.	6000.0	6000.0	6000.0	6000.0	12000.
Low	4000.0	8000.0	4000.0	4000.0	4000.0	4000.0	8000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl190
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	4929.9	4960.8	4849.3	11540.	487.00	10325.	4945.2
SDev	5.2	5.9	7.9	14.	.47	74.	14.4
%RSD	.10550	.11961	.16201	.12258	.09567	.71492	.29047
#1	4924.3	4954.0	4840.4	11537.	486.49	10342.	4934.0
#2	4934.6	4965.0	4852.7	11527.	487.41	10389.	4940.3
#3	4930.8	4963.4	4855.0	11555.	487.09	10244.	4961.4
Errors	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.0		6000.0	12000.	600.00	12000.	6000.0
Low	4000.0		4000.0	8000.0	400.00	8000.0	4000.0
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	4953.6	4895.7	5029.3	5539.5	4838.4	5162.9	5122.4
SDev	2.4	10.3	9.0	14.9	5.1	9.3	5.8
%RSD	.04940	.20941	.17874	.26984	.10541	.17924	.11303
#1	4951.2	4883.8	5019.0	5556.8	4844.1	5154.4	5116.0
#2	4956.1	4901.1	5035.6	5531.4	4836.8	5172.8	5124.1
#3	4953.6	4902.1	5033.2	5530.4	4834.3	5161.6	5127.2

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.0	6000.0	6000.0	6000.0	6000.0	6000.0	6000.0
w	4000.0	4000.0	4000.0	4000.0	4000.0	4000.0	4000.0
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Ave	5053.9	5027.4	5016.0	4922.6	4929.1	4861.1	4881.5
SDev	3.6	16.1	13.7	8.0	15.7	7.6	13.5
%RSD	.07104	.32036	.27360	.16255	.31755	.15571	.27588
#1	5050.0	5010.1	5001.2	4913.7	4911.1	4856.2	4877.8
#2	5057.0	5042.0	5018.4	4924.9	4937.5	4857.3	4896.4
#3	5054.7	5030.1	5028.4	4929.1	4938.8	4869.8	4870.2
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	6000.0						
Low	4000.0						
Elem	Si2881						
Units	ug/l						
Ave	5478.1						
SDev	8.9						
%RSD	.16237						
#1	5468.5						
#2	5486.1						
#3	5479.7						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Waven	--	361.384	371.030	--	--	--	--
Ave	--	89387	293265	--	--	--	--
SDev	--	40.64890	198.3633	--	--	--	--
%RSD	--	.0454753	.0676396	--	--	--	--
#1	--	89357	293307	--	--	--	--
#2	--	89433	293439	--	--	--	--
#3	--	89370	293049	--	--	--	--

Method: MEIN1      Sample Name: 970836701F      Operator:  
 Run Time: 08/28/97 11:45:20  
 Comment: ECCITIWF      ITIWF  
 Mode: CONC Corr. Factor: 1      *Jem*  
*913M*

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Ave	24.353	.31416	-.80479	2.3012	1.5989	272.29	.41408
SDev	4.701	.34156	1.42212	.6855	1.0524	.25	.16818
%RSD	19.302	108.72	176.71	29.788	65.820	.09330	40.614

#1	27.673	.37306	-.55873	1.8048	.39461	272.21	.60826
#2	18.974	-.05302	.47824	3.0833	2.3418	272.08	.31483
#3	26.412	.62245	-2.3339	2.0154	2.0603	272.57	.31916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.28049	76831.	1.2733	2.1986	8.5695	122.91	29230.
SDev	.14902	128.	.2194	.3656	.3318	4.01	26.
ZRSD	.53.127	.16692	17.231	16.630	3.8717	3.2647	.08737
#1	.44802	76901.	1.5248	2.6170	8.8620	126.02	29226.
#2	.23069	76908.	1.1734	1.9404	8.2090	118.38	29207.
#3	.16275	76683.	1.1216	2.0383	8.6376	124.33	29257.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	132.28	130.28	4.1614	2820.0	-.04545	10512.	2.7996
SDev	.17	5.07	.4234	24.7	.17338	61.	.7175
ZRSD	.12743	3.8939	10.174	.87579	381.45	.57655	25.629
#1	132.28	136.14	4.6228	2829.2	.15452	10581.	3.4408
#2	132.45	127.41	3.7906	2792.1	-.13701	10488.	2.9335
#3	132.11	127.30	4.0709	2838.9	-.15387	10468.	2.0246
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3340
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.27029	10.396	13.909	13.053	415.83	-.66751	.44180
SDev	.17484	.111	.709	.137	.12	1.19256	.23309
ZRSD	64.686	1.0714	5.1007	1.0504	.02844	178.66	52.760
#1	.46949	10.510	14.598	13.151	415.78	-1.7258	.71074
#2	.14225	10.391	13.181	12.896	415.75	.62464	.31665
#3	.19914	10.287	13.948	13.112	415.97	-.90131	.29801
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	52.120	1.2457	2.8280	-.70041	.82052	-3.0188	.30042
SDev	1.147	1.5893	.9324	.97102	.50725	3.4263	.84053
ZRSD	2.2013	127.59	32.971	138.63	61.820	113.50	279.79
#1	53.440	1.9072	1.7536	-1.5901	1.3530	-3.9312	1.1248

#2	51.555	2.3973	3.4257	-.84652	.34297	.77132	.33179
#3	51.365	-.56754	3.3048	.33538	.76560	-5.8965	-.55536
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	6522.7						
SDev	15.9						
%RSD	.24303						
#1	6523.5						
#2	6506.5						
#3	6538.2						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88840	292086	--	--	--	--
SDev	--	282.9175	846.0788	--	--	--	--
%RSD	--	.3184562	.2896674	--	--	--	--
#1	--	88674	291577	--	--	--	--
#2	--	89167	293063	--	--	--	--
#3	--	88680	291619	--	--	--	--

Method: MEIN1      Sample Name: 970836701FS      Operator:

Run Time: 08/28/97 11:53:52

Comment: ECCITIWS ~~F1WFS~~ ITIWFS

Mode: CONC    Corr. Factor: 1 <sup>Jem</sup> <sub>93H7</sub>

Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2054.3	469.05	1930.1	490.97	1913.8	2164.6	47.382
SDev	7.0	1.61	7.0	1.91	1.6	1.8	.059
%RSD	.33889	.34261	.36480	.38950	.08449	.08396	.12545
#1	2061.9	467.57	1926.3	490.20	1912.7	2166.2	47.424
#2	2052.7	470.76	1938.2	493.14	1915.7	2162.7	47.408
#3	2048.3	468.82	1925.7	489.56	1913.1	2165.0	47.314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	45.887	99001.	183.98	460.55	252.33	999.60	49589.
SDev	.233	163.	.56	1.24	.26	2.54	83.

%RSD	.50799	.16490	.30413	.26977	.10194	.25450	.16834
#1	45.637	98915.	184.01	460.31	252.57	998.62	49638.
#2	46.098	99189.	184.53	461.89	252.37	1002.5	49637.
#3	45.927	98898.	183.41	459.44	252.06	997.69	49493.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	607.99	597.08	467.66	26572.	48.126	31407.	1914.1
SDev	.42	5.16	.98	77.	.502	192.	3.4
%RSD	.06919	.86467	.20885	.29124	1.0429	.61239	.17984
#1	607.55	595.69	466.65	26621.	48.090	31609.	1911.0
#2	608.39	602.80	468.60	26613.	48.645	31387.	1917.8
#3	608.02	592.76	467.75	26483.	47.643	31226.	1913.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pa
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	468.15	481.12	959.81	1517.4	1379.8	987.96	940.47
SDev	.45	.81	2.75	5.8	.9	1.37	.56
%RSD	.09538	.16933	.28618	.38235	.06735	.13844	.05927
#1	467.83	480.53	957.88	1523.6	1380.6	986.64	939.82
#2	468.66	482.05	962.95	1516.4	1378.8	987.87	940.77
#3	467.97	480.78	958.60	1512.1	1380.0	989.37	940.80
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.00
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1037.5	490.98	490.96	469.19	468.98	1922.9	1933.7
SDev	1.6	1.13	2.56	1.90	1.85	7.7	8.9
%RSD	.15787	.23104	.52096	.40593	.39385	.40008	.46073
#1	1035.6	489.73	490.43	468.85	466.93	1927.0	1926.0
#2	1038.4	491.94	493.74	471.24	470.52	1927.8	1943.4
#3	1038.6	491.26	488.71	467.48	469.49	1914.1	1931.6
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	7884.1						
SDev	14.3						
%RSD	.18146						

#1	7896.5
#2	7887.3
	7868.4

Errors NOCHECK  
High  
Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgc	--	87567	287926	--	--	--	--
SDev	--	279.0275	979.3524	--	--	--	--
%RSD	--	.3186433	.3401403	--	--	--	--
#1	--	87333	287131	--	--	--	--
#2	--	87493	287627	--	--	--	--
#3	--	87876	289020	--	--	--	--

Method: MEIN1 Sample Name: 970836701FD Operator:  
Run Time: 08/28/97 12:02:25  
Comment: ECCITIWD ~~ITIWFD~~ ITIWFD  
Mode: CONC Corr. Factor: 1 <sup>1.00</sup><sub>913197</sub>

Element	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
...ge	28.937	.69338	-.01528	1.0624	.89491	259.25	.17661
SDev	3.337	20327	55164	1613	06399	13	14826

#1	32.318	.91335	-.05946	1.0511	.85887	259.26	.34759
#2	28.846	.65433	-.54350	.90703	.85707	259.38	.09872
#3	25.646	.51247	.55712	1.2290	.96879	259.12	.08353

Errors	LC Pass							
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.	
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000	

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.09025	73607.	1.2245	1.8311	8.4506	124.72	27861.
SDev	.03771	89.	.1978	.2691	.0387	6.16	28.
%RSD	41.788	.12140	16.156	14.699	.45835	4.9391	.10053

#1	.04872	73508.	1.4352	1.9530	8.4062	126.56	27837.
#2	.12235	73631.	1.1953	1.5225	8.4772	129.75	27891.
#3	.09967	73681.	1.0429	2.0177	8.4685	117.85	27854.

Errors	LC Pass							
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.	
'~w	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0	

Avg	126.73	123.76	4.5141	2660.2	.02648	10070.	1.3489
SDev	.13	2.73	.5054	15.8	.12728	48.	1.8806
%RSD	.10126	2.2056	11.196	.59490	480.62	.47730	139.42
#1	126.60	126.77	4.0977	2673.1	-.02781	10121.	3.3362
#2	126.86	123.09	5.0764	2664.9	.17190	10063.	1.1133
#3	126.72	121.44	4.3683	2642.6	-.06465	10025.	-.40283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.07185	9.8017	12.306	12.175	396.32	-.05043	.14366
SDev	.12520	.0468	.667	.078	.11	1.55943	.11794
%RSD	174.24	.47768	5.4206	.64384	.02876	3092.2	82.101
#1	.14425	9.7955	12.063	12.259	396.45	1.5949	.21210
#2	.14402	9.8513	13.060	12.162	396.24	-.23936	.21141
#3	-.07271	9.7583	11.794	12.103	396.27	-1.5068	.0074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	52.641	.11664	1.5344	.77860	.65067	-5.0769	2.5116
SDev	.907	.87686	.6362	.63740	.18387	.9865	1.1320
%RSD	1.7238	751.74	41.462	81.865	28.259	19.431	45.072
#1	52.898	-.52887	1.8398	1.4933	.62365	-4.0197	1.9176
#2	53.392	1.1149	.80309	.26896	.84656	-5.2383	1.8003
#3	51.632	-.23614	1.9603	.57356	.48181	-5.9727	3.8170
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
ELEM	Si2881						
Units	ug/l						
Avg	6225.5						
SDev	8.8						
%RSD	.14113						
#1	6222.4						
#2	6235.5						
#3	6218.8						
Errors	NOCHECK						
High							
Low							

tStd	1 NOTUSED	2 *Counts	3 *Counts	4 NOTUSED	5 NOTUSED	6 NOTUSED	7 NOTUSED
node							

Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	89082	292730	--	--	--	--
ev	--	174.9486	528.5549	--	--	--	--
%RSD	--	.1963905	.1805604	--	--	--	--
#1	--	88999	292593	--	--	--	--
#2	--	88964	292284	--	--	--	--
#3	--	89283	293314	--	--	--	--

Method: MEIN1      Sample Name: 970836701FL 5X      Operator:

Run Time: 08/28/97 12:10:56

Comment: ECCITIWL ~~ITIWFL~~ ITIWFL

Mode: CONC    Corr. Factor: 1

SEM

91357

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-7.3133	.03782	-1.3451	.63466	1.2793	50.345	-.03664
SDev	3.4094	.48973	1.5711	.69001	.3540	.040	.12593
%RSD	46.619	1295.1	116.81	108.72	27.674	.07979	343.72
#1	-3.7953	.05266	-3.1550	1.4253	.95657	50.342	.10797
#2	-7.5420	-.45916	-.33248	.15417	1.6579	50.386	-.09570
#3	-10.603	.51995	-.54777	.32448	1.2233	50.306	-.12217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.08595	14325.	.24764	.47603	1.3410	20.648	5335.9
SDev	.08118	18.	.18284	.18004	.0986	2.655	4.9
%RSD	94.462	.12755	73.831	37.822	7.3518	12.859	.09123
#1	.00903	14316.	.44285	.64651	1.3563	17.632	5330.3
#2	.07799	14314.	.21968	.49383	1.4310	21.679	5338.9
#3	.17082	14346.	.08040	.28775	1.2356	22.633	5338.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	23.990	27.220	.87480	420.34	.21855	1838.2	2.1757
SDev	.052	5.121	.10665	19.39	.20992	45.5	1.5894
%RSD	.21651	18.815	12.191	4.6118	96.051	2.4768	73.054
#1	23.962	32.927	.91452	442.48	.43474	1887.4	2.2436
#2	24.050	25.705	.95589	412.17	.01552	1797.6	3.7300
#3	23.957	23.027	.75400	406.39	.20539	1829.5	.55335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000

<b>Elem</b>	<b>V_2924</b>	<b>Zn2138</b>	<b>Mo2020</b>	<b>Li6707</b>	<b>Sr4215</b>	<b>Sn1899</b>	<b>Ti3349</b>
<b>Units</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>
<b>Avg</b>	<b>.11743</b>	<b>1.8499</b>	<b>2.4284</b>	<b>2.1031</b>	<b>76.950</b>	<b>-1.1735</b>	<b>.10291</b>
<b>SDev</b>	<b>.08040</b>	<b>.0708</b>	<b>.0643</b>	<b>.0557</b>	<b>.037</b>	<b>1.7931</b>	<b>.03381</b>
<b>ZRSD</b>	<b>68.467</b>	<b>3.8251</b>	<b>2.6493</b>	<b>2.6480</b>	<b>.04809</b>	<b>152.81</b>	<b>32.851</b>

<b>#1</b>	<b>.20565</b>	<b>1.9017</b>	<b>2.5022</b>	<b>2.1620</b>	<b>76.959</b>	<b>.83405</b>	<b>.14155</b>
<b>#2</b>	<b>.04827</b>	<b>1.8788</b>	<b>2.3993</b>	<b>2.0961</b>	<b>76.981</b>	<b>-1.7383</b>	<b>.08844</b>
<b>#3</b>	<b>.09838</b>	<b>1.7693</b>	<b>2.3838</b>	<b>2.0513</b>	<b>76.909</b>	<b>-2.6162</b>	<b>.07875</b>

<b>Errors</b>	<b>LC Pass</b>						
<b>High</b>	<b>100000.</b>	<b>25000.</b>	<b>25000.</b>	<b>5000.0</b>	<b>10000.</b>	<b>25000.</b>	<b>10000.</b>
<b>Low</b>	<b>-50.000</b>	<b>-20.000</b>	<b>-50.000</b>	<b>-50.000</b>	<b>-30.000</b>	<b>-50.000</b>	<b>-50.000</b>

<b>Elem</b>	<b>B_2496</b>	<b>2068/1</b>	<b>2068/2</b>	<b>2203/1</b>	<b>2203/2</b>	<b>1960/1</b>	<b>1960/2</b>
<b>Units</b>	<b>ug/l</b>						
<b>Avg</b>	<b>9.4325</b>	<b>.89518</b>	<b>.50448</b>	<b>-.11632</b>	<b>.11461</b>	<b>-.84291</b>	<b>-1.5959</b>
<b>SDev</b>	<b>.4432</b>	<b>.47075</b>	<b>.80134</b>	<b>.51260</b>	<b>.65480</b>	<b>2.59392</b>	<b>1.0605</b>
<b>ZRSD</b>	<b>4.6991</b>	<b>52.588</b>	<b>158.85</b>	<b>440.69</b>	<b>571.35</b>	<b>307.73</b>	<b>66.42?</b>

<b>#1</b>	<b>9.9405</b>	<b>1.4387</b>	<b>1.4185</b>	<b>-.63200</b>	<b>.39432</b>	<b>-3.8317</b>	<b>-2.8174</b>
<b>#2</b>	<b>9.2326</b>	<b>.61727</b>	<b>-.07715</b>	<b>-.11010</b>	<b>-.63360</b>	<b>.82166</b>	<b>-.90881</b>
<b>#3</b>	<b>9.1244</b>	<b>.62956</b>	<b>.17204</b>	<b>.39314</b>	<b>.58310</b>	<b>.48126</b>	<b>-1.0616</b>

<b>Errors</b>	<b>LC Pass</b>	<b>NOCHECK</b>	<b>NOCHECK</b>	<b>NOCHECK</b>	<b>NOCHECK</b>	<b>NOCHECK</b>	<b>NOCHECK</b>
<b>High</b>							
<b>Low</b>							

<b>Elem</b>	<b>Si2881</b>						
<b>Units</b>	<b>ug/l</b>						
<b>Avg</b>		<b>1198.5</b>					
<b>SDev</b>		<b>1.3</b>					
<b>ZRSD</b>		<b>.10895</b>					

<b>#1</b>	<b>1200.0</b>						
<b>#2</b>	<b>1197.7</b>						
<b>#3</b>	<b>1197.8</b>						

<b>Errors</b>	<b>NOCHECK</b>						
<b>High</b>							
<b>Low</b>							

<b>IntStd</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Mode</b>	<b>NOTUSED</b>	<b>*Counts</b>	<b>*Counts</b>	<b>NOTUSED</b>	<b>NOTUSED</b>	<b>NOTUSED</b>	<b>NOTUSED</b>
<b>Elem</b>	--	Sc	Y	--	--	--	--
<b>Wavlen</b>	--	361.384	371.030	--	--	--	--
<b>Avg</b>	--	93047	306146	--	--	--	--
<b>SDev</b>	--	344.2184	1075.616	--	--	--	--
<b>ZRSD</b>	--	.3699417	.3513413	--	--	--	--
<b>#1</b>	--	92653	304912	--	--	--	--
<b>#2</b>	--	93196	306638	--	--	--	--
<b>#3</b>	--	93291	306887	--	--	--	--

Method: MEIN1 Sample Name: 970836702F  
Run Time: 08/28/97 12:19:28  
Instrument: ECCITIWDF  
Mode: CONC Corr. Factor: 1

### Operator;

High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	43.673	.23787	.23450	-.42911	.87745	-5.1723	-.76290
SDev	.070	1.0110	.53321	.66284	.48238	.6011	.86671
ZRSD	.15976	425.01	227.38	154.47	54.975	11.622	113.61
#1	43.696	-.12830	.04750	-1.1928	1.4283	-5.7373	-1.6342
#2	43.729	-.53900	-.18002	-.09192	.53043	-4.5406	.09912
#3	43.595	1.3809	.83602	-.00267	.67364	-5.2389	-.75359
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	6154.4						
SDev	5.4						
ZRSD	.08846						
#1	6155.4						
#2	6159.3						
#3	6148.5						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	89376	293812	--	--	--	--
SDev	--	282.8080	959.3284	--	--	--	--
ZRSD	--	.3164237	.3265110	--	--	--	--
#1	--	89082	292802	--	--	--	--
#2	--	89401	293923	--	--	--	--
#3	--	89646	294711	--	--	--	--

---

Method: MEIN1	Sample Name: 970836704F	Operator:					
Run Time: 08/28/97 12:28:01							
Comment: ECCITISN ITSNF							
Mode: CONC Corr. Factor: 1 <del>1.4357</del>							
Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	126.12	.62394	1.1349	1.6608	5.4889	19.739	.24065
SDev	2.98	1.2299	.2475	1.0089	.9328	.033	.10312
ZRSD	2.3617	197.12	21.806	60.746	16.994	.16868	42.851
#1	129.52	.37031	.87802	1.5913	4.5046	19.731	.35955
#2	123.96	-.45938	1.3718	.68848	5.6023	19.711	.18684

#3	124.89	1.9609	1.1550	2.7026	6.3598	19.776	.17557
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
ELEM	Cd2265	Ca3179	Cr2677	Co22^6	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.06671	41317.	11.502	.24695	15.186	39.374	8803.9
SDev	.10968	42.	.262	.15442	.157	2.486	4.1
%RSD	164.40	.10138	2.2739	62.530	1.0322	6.3138	.04642
#1	.03706	41357.	11.757	.36933	15.323	36.767	8808.5
#2	-.05573	41320.	11.515	.29805	15.219	41.718	8802.5
#3	-.18147	41274.	11.234	.07346	15.015	39.637	8800.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
ELEM	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	4.5740	5.1010	4.2035	4317.2	.00588	41033.	-1.0985
SDev	.0137	4.3509	.0643	8.7	.25155	84.	1.4113
%RSD	.29898	85.294	1.5306	.20156	4277.5	.20592	128.48
#1	4.5852	10.125	4.2272	4326.9	.29157	41127.	-.78122
#2	4.5588	2.5744	4.1307	4314.5	-.09154	41010.	.12717
#3	4.5782	2.6038	4.2526	4310.1	-.18238	40963.	-2.6414
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	4.7391	11.858	40.344	20.440	219.78	1.3030	.55400
SDev	.1750	.035	.748	.031	.08	.3646	.03184
%RSD	3.6926	.29763	1.8530	.14952	.03642	27.984	5.7465
#1	4.8973	11.839	41.181	20.466	219.70	1.7230	.52938
#2	4.7689	11.899	40.110	20.406	219.76	1.0671	.58995
#3	4.5511	11.836	39.743	20.447	219.86	1.1189	.54266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	49.604	2.7927	1.0955	.54913	.66112	-.83898	2.1203
SDev	.128	.8078	1.1753	1.6334	1.1090	1.47505	.6920
%RSD	.25868	28.925	107.28	297.46	167.74	175.81	32.638
#1	49.632	2.2954	1.2396	.85033	.13049	-.70898	1.6702
#2	49.716	2.3580	-.14517	-1.2139	-.08284	.56676	1.7735
#3	49.464	3.7248	2.1922	2.0110	1.9357	-2.3747	2.9171

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

Elem	Si2881						
Units	ug/l						
Avg	10373.						
SDev	11.						
ZRSD	.10169						

#1	10385.						
#2	10367.						
#3	10366.						

Errors	NOCHECK						
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88705	291665	--	--	--	--
SDev	--	210.7297	672.1580	--	--	--	--
ZRSD	--	.2375624	.2304552	--	--	--	--
#1	--	88463	290893	--	--	--	--
#2	--	88804	291985	--	--	--	--
#3	--	88848	292118	--	--	--	--

Method: MEIN1      Sample Name: 970837401

Operator:

Run Time: 08/28/97 12:36:33

Comment: MW1

Mode: CONC      corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	391.49	.81524	-1.3134	.70024	7.4295	164.55	.30662
SDev	2.23	.47847	1.3391	.35759	.2857	.07	.09659
ZRSD	.56858	58.690	101.96	51.067	3.8458	.04042	31.502
#1	391.54	1.3641	-2.2395	.38440	7.4667	164.48	.40961
#2	393.70	.48581	-1.9227	.62783	7.6948	164.61	.29219
#3	389.25	.59585	.22204	1.0885	7.1270	164.56	.21806

Errors	LC Pass						
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.01973	12295.	3.9652	8.8131	8.3643	8420.4	16905.
SDev	.07574	18.	.0596	.1164	.2987	5.2	49.
ZRSD	383.95	.14394	1.5037	1.3210	3.5706	.06222	.29053

#1	-.06440	12277.	4.0125	8.8385	8.3852	8419.6	16849.
#2	.08249	12296.	3.9848	8.9147	8.0558	8415.6	16939.
"3	.04109	12313.	3.8982	8.6861	8.6521	8426.0	16929.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	349.65	339.28	28.008	25000.	-.13345	29514.	-.77196
SDev	.34	.88	.109	120.	.23799	169.	.64104
%RSD	.09648	.25843	.38751	.48096	178.34	.57312	83.040
#1	349.42	340.26	28.018	24874.	.00623	29337.	-.08341
#2	349.49	339.02	27.895	25113.	-.40824	29674.	-.88095
#3	350.03	338.56	28.111	25014.	.00167	29530.	-1.3515
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	11.677	23.881	10.107	7.0641	176.59	-.16233	3.6270
SDev	.086	.102	1.119	.0524	.09	.65435	.0475
%RSD	.73921	.42755	11.066	.74192	.05168	403.10	1.3100
1	11.583	23.892	11.206	7.0094	176.49	.13388	3.6691
#2	11.698	23.773	10.145	7.1139	176.67	.29153	3.5755
#3	11.751	23.977	8.9704	7.0691	176.61	-.91240	3.6364
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avge	79.372	.10945	.99507	.87220	.78666	-.3.7499	-.09707
SDev	.371	.60613	.35798	1.0180	.21427	2.6487	1.14976
%RSD	.46789	553.80	35.976	116.71	27.238	70.634	1184.5
#1	79.748	-.01852	.58541	2.0259	1.0335	-3.9567	-1.3823
#2	79.006	-.42248	1.1521	.10054	.67801	-6.2891	.25712
#3	79.361	.76934	1.2477	.49014	.64848	-1.0038	.83393
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avge	9563.6						
SDev	30.4						
%RSD	.31743						
#1	9528.8						

#2 9585.0  
#3 9576.9

Errors NOCHECK  
High  
Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgc	--	89982	295520	--	--	--	--
SDev	--	600.2136	1922.302	--	--	--	--
ZRSD	--	.6670349	.6504806	--	--	--	--
#1	--	89332	293456	--	--	--	--
#2	--	90100	295846	--	--	--	--
#3	--	90515	297259	--	--	--	--

Method: MEIN1 Sample Name: 970837401S Operator:  
Run Time: 08/28/97 12:45:06  
Comment: MW1S  
Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	2905.9	464.10	1916.6	485.46	1904.1	2055.8	47.039
SDev	13.8	2.18	5.0	1.45	7.3	.9	.135
ZRSD	.47569	.47051	.26020	.29839	.38086	.04458	.28620
#1	2894.6	464.33	1921.9	486.74	1907.1	2056.3	47.195
#2	2901.7	461.81	1912.0	485.76	1895.9	2054.8	46.955
#3	2921.3	466.16	1915.9	483.89	1909.4	2056.4	46.969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	45.720	32586.	188.38	469.16	256.80	10412.	37591.
SDev	.207	65.	.15	.47	.66	15.	106.
ZRSD	.45370	.20050	.07826	.10062	.25619	.13948	.28089
#1	45.835	32515.	188.52	469.11	256.55	10399.	37505.
#2	45.481	32601.	188.40	468.72	256.30	10408.	37558.
#3	45.845	32643.	188.23	469.66	257.54	10428.	37709.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgc	854.06	840.85	485.28	49972.	47.609	53622.	1914.9
SDev	.58	6.14	.44	278.	.197	487.	9.7

%RSD	.06827	.72996	.09028	.55683	.41352	.90751	.50706
#1	853.41	847.87	484.81	49784.	47.681	53131.	1907.7
	854.26	836.50	485.69	49842.	47.386	53630.	1911.1
#3	854.53	838.19	485.33	50292.	47.759	54104.	1925.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	479.43	499.70	949.51	1580.0	1138.3	979.61	937.18
SDev	.21	.77	.77	7.1	.3	2.55	.23
%RSD	.04424	.15335	.08109	.45115	.02255	.26050	.02419
#1	479.67	499.50	948.63	1579.2	1138.4	977.44	936.99
#2	479.27	499.06	949.92	1573.4	1138.1	978.96	937.13
#3	479.34	500.55	950.00	1587.5	1138.6	982.42	937.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000_0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1070.4	483.19	486.60	463.00	464.66	1909.0	1920.4
SDev	3.7	.78	2.53	2.51	2.30	10.4	2.4
SD	.34442	.16073	.51901	.54181	.49585	.54279	.12390
#1	1068.5	482.32	488.95	464.73	464.13	1920.5	1922.7
#2	1068.1	483.44	486.91	460.12	462.67	1900.3	1917.9
#3	1074.7	483.81	483.93	464.14	467.18	1906.3	1920.6
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	12284.						
SDev	46.						
%RSD	.37158						
#1	12244.						
#2	12273.						
#3	12334.						
Errors	NOCHECK						
High							
Low							

tStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--

Avg	--	88601	290883	--	--	--	--
SDev	--	440.4592	1382.024	--	--	--	--
%RSD	--	.4971248	.4751139	--	--	--	--
#1	--	88109	289367	--	--	--	--
#2	--	88958	292073	--	--	--	--
#3	--	88737	291208	--	--	--	--

Method: MEIN1      Sample Name: CCV4      Operator:  
Run Time: 08/28/97 12:53:38  
Comment: CCV  
Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1011.5	992.21	995.01	1.4134	997.96	991.12	1003.4
SDev	2.5	2.34	3.10	1.1459	2.97	.36	.5
%RSD	.24260	.23600	.31150	.81.074	.29751	.03677	.05121
#1	1008.7	990.43	992.86	2.6370	994.54	991.47	1003.4
#2	1013.0	994.86	998.57	.36560	999.44	990.74	1003.8
#3	1012.8	991.34	993.61	1.2375	999.89	991.16	1002.9
Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass
Value	1000.0	1000.0	1000.0		1000.0	1000.0	1000.0
Range	10.490	10.490	10.490		10.490	10.490	10.490
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	988.72	33.361	999.17	989.32	1009.0	969.97	27.855
SDev	.94	1.703	.22	.92	1.5	3.20	.779
%RSD	.09498	5.1041	.02206	.09287	.14658	.32982	2.7953
#1	987.81	35.096	999.30	989.26	1007.3	970.98	28.500
#2	989.69	33.293	999.29	990.25	1009.6	972.54	28.075
#3	988.66	31.693	998.91	988.43	1010.2	966.38	26.996
Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	1000.0		1000.0	1000.0	1000.0	1000.0	
Range	10.490		10.490	10.490	10.490	10.490	
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1017.4	1003.3	999.12	-3.0165	99.601	88.643	980.61
SDev	.6	8.3	.51	30.5247	.427	109.65	1.76
%RSD	.05842	.82811	.05096	1011.9	.42887	123.70	.17980
#1	1017.2	1012.1	998.55	29.846	99.995	212.01	978.60
#2	1018.1	1002.2	999.53	-8.4116	99.662	51.645	981.88
#3	1017.0	995.62	999.28	-30.484	99.147	2.2768	981.36
Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	1000.0	1000.0	1000.0		100.00		1000.0
Range	10.490	10.490	10.490		10.490		10.490
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349

Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1003.5	989.02	.81669	1013.4	1000.2	.47313	.23157
SDev	.2	1.08	.12624	.9	.1	.75963	.09424
%RSD	.01591	.10888	15.458	.09338	.00752	160.56	40.698
#1	1003.7	987.88	.69977	1013.4	1000.2	-.30818	.33175
#2	1003.6	990.01	.95055	1012.4	1000.1	.51852	.21828
#3	1003.4	989.17	.79977	1014.3	1000.1	1.2091	.14468
Errors	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	NOCHECK	NOCHECK
Value	1000.0	1000.0		1000.0	1000.0		
Range	10.490	10.490		10.490	10.490		

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1.8705	.66210	1.7883	991.96	992.33	990.73	997.15
SDev	.6288	.34599	1.7506	2.30	2.74	2.01	3.82
%RSD	33.617	52.256	97.892	.23188	.27630	.20294	.38276
#1	2.5703	.45964	3.7239	991.93	989.68	990.47	994.06
#2	1.6885	.46507	.31583	994.28	995.15	992.86	1001.4
#3	1.3529	1.0616	1.3252	989.68	992.17	988.86	995.98
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Si2881						
Units	ug/l						
Avg	6.1209						
SDev	2.0778						
%RSD	33.946						

#1	7.9537						
#2	6.5454						
#3	3.8637						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	91390	300906	--	--	--	--
SDev	--	283.0094	966.7969	--	--	--	--
%RSD	--	.3096711	.3212957	--	--	--	--
#1	--	91106	299953	--	--	--	--
#2	--	91393	300878	--	--	--	--
#3	--	91672	301886	--	--	--	--

Method: MEIN1

Sample Name: CCV123

Operator:

Run Time: 08/28/97 13:02:10

Comment: CCV

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	15.404	1.5792	-1.1545	933.64	-4.0399	.72342	.62112
SDev	2.466	.3452	.9772	1.88	.9533	.00905	.16656
ZRSD	16.009	21.862	84.637	.19064	23.597	1.2511	26.816
#1	18.022	1.8624	-.26769	983.40	-3.3688	.73387	.81325
#2	15.064	1.1946	-2.2021	985.63	-5.1311	.71826	.53263
#3	13.125	1.6805	-.99380	981.90	-3.6199	.71812	.51748
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK
Value				1000.0			
Range				10.490			
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.04520	49166.	1.6016	-.02764	.58633	28.503	46143
SDev	.01754	153.	.0677	.19710	.35569	3.163	7
ZRSD	38.811	.31210	4.2259	713.01	60.664	11.096	.15097
#1	.02959	48995.	1.6024	-.19485	.93046	25.174	46127.
#2	.04183	49213.	1.6689	-.07776	.60843	31.468	46219.
#3	.06419	49292.	1.5335	.18967	.22010	28.867	46082.
Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pass
Value		50000.					
Range		10.490					
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.11321	-.98605	-1.9134	51528.	.00416	48470.	-3.0804
SDev	.01800	.61937	.1417	286.	.18389	373.	2.2180
ZRSD	15.898	62.813	7.4045	.55588	4416.4	.76922	72.003
#1	-.09606	-.36013	-1.7700	51706.	.21242	48546.	-.9618
#2	-.13195	-1.5987	-2.0533	51680.	-.13585	48799.	-5.3860
#3	-.11163	-.99936	-1.9170	51197.	-.06408	48065.	-2.8933
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	OC Pass	NOCHECK
Value				50000.		50000.	
Range				10.490		10.490	
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.31209	.34287	1026.1	1.4176	3.1854	1034.5	1018.7
SDev	.20510	.09012	4.9	.0548	.0399	6.6	.8
ZRSD	65.716	26.285	.47681	3.8687	1.2537	.63623	.07702
#1	.40476	.23886	1021.6	1.3577	3.2242	1027.7	1018.0
#2	.45450	.39782	1025.5	1.4654	3.1876	1035.0	1018.7
#3	.07702	.39192	1031.3	1.4297	3.1445	1040.8	1019.5
Errors	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	OC Pass	OC Pass
Value			1000.0			1000.0	
Range							

Range		10.490			10.490	10.490
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1
Units	ug/l					1960/2
Avg	980.31	980.95	984.99	5.3667	-.31191	-13.609
SDev	1.45	3.43	1.81	1.1974	.33588	1.071
%RSD	.14771	.34995	.18373	22.31	107.69	7.8687
#1	980.76	978.16	986.01	5.6347	-.02106	-13.115
#2	981.48	984.79	986.05	4.0580	-.23513	-14.837
#3	978.69	979.91	982.90	6.4074	-.67953	-12.873
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1000.0					
Range	10.490					
Elem	Si2881					
Units	ug/l					
Avg	995.95					
SDev	5.53					
%RSD	.55517					
#1	1000.8					
#2	997.19					
#3	989.91					
Errors	NOCHECK					
Value						
Range						
IntStd	1	2	3	4	5	6
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--
Wavlen	--	361.384	371.030	--	--	--
Avg	--	88592	290859	--	--	--
SDev	--	348.8844	1210.033	--	--	--
%RSD	--	.3938088	.4160201	--	--	--
#1	--	88216	289579	--	--	--
#2	--	88656	291015	--	--	--
#3	--	88905	291984	--	--	--

Method: MEIN1      Sample Name: BLANK      Operator:

Run Time: 08/28/97 13:10:43

Comment: CCB

Mode: CONC    Corr. Factor: 1

Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-2.3839	-.12253	1.5963	1.8281	.02202	.34819	.14653
SDev	2.7877	.23264	1.3379	.6400	.83128	.02160	.17911
%RSD	116.93	189.86	83.810	35.009	3774.6	6.2039	122.24
#1	.41260	.08620	1.8864	2.5667	-.39244	.36912	.35227
#2	-2.4018	-.08045	.13718	1.4795	-.52053	.34949	.06190
#3	-5.1626	-.37334	2.7654	1.4381	.97905	.32598	.02541

Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.15385	17.112	.33291	.03732	.12042	.30953	25.576
SDev	.02264	5.048	.49854	.42479	.04579	1.5702	4.087
ZRSD	14.714	29.503	149.75	1138.3	.38.028	507.30	15.980
#1	.17224	22.916	.81781	.49206	.14498	-1.4520	30.251
#2	.12857	13.738	.35917	-.03082	.14870	1.5623	23.795
#3	.16074	14.682	-.17824	-.34928	.06759	.81831	22.682
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
Elem	Mn2576	Mn3441	Ni2316	X_7664	Aq3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.13757	2.5096	.20584	7.0565	.01999	71.889	-.43592
SDev	.03113	10.364	.24941	40.286	.24384	72.964	2.48586
ZRSD	22.626	412.99	121.17	570.91	1219.6	101.49	570.25
#1	-.10195	12.490	.03793	47.644	.11446	152.93	-3.2685
#2	-.15117	3.2384	.49244	6.4467	.20246	51.319	1.3827
#3	-.15957	-8.1998	.08716	-32.921	-.25695	11.419	.57807
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.15777	-.67040	1.2399	.50365	.18243	-.86028	.55383
SDev	.21085	.06699	.6041	.11178	.06926	.82865	.16729
ZRSD	133.64	9.9919	48.723	22.193	37.968	96.323	30.207
#1	.16099	-.59307	1.8417	.62050	.26191	-1.8127	.73020
#2	.36699	-.70764	1.2446	.49270	.15041	-.30458	.53389
#3	-.05466	-.71049	.63349	.39775	.13496	-.46355	.39740
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1950/1	1960/2
Units	ug/l						
Avg	1.4245	1.9256	1.7793	-1.1266	.37857	-.63530	2.7103
SDev	.4820	1.0381	1.4020	1.7511	.53707	2.33176	1.4760
ZRSD	33.837	53.909	78.793	155.43	141.87	367.03	54.456
#1	1.9699	1.0147	3.3414	.66774	-.20430	1.6373	2.0107
#2	1.2481	1.7062	1.3662	-1.2166	.48659	-3.0220	1.7143
#3	1.0555	3.0558	.63030	-2.8309	.85343	-.52114	4.4060

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.00000						
Range	100.00						

Elem	Si2881
Units	ug/l
Avg	-.54607
SDev	1.93621
%RSD	354.57

#1	1.6486
#2	-2.0127
#3	-1.2742

Errors	NOCHECK
Value	
Range	

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	91204	301512	--	--	--	--
SDev	--	301.3143	961.0829	--	--	--	--
%RSD	--	.3303753	.3187541	--	--	--	--
#1	--	90936	300697	--	--	--	--
#2	--	91145	301268	--	--	--	--
	--	91530	302572	--	--	--	--

Method: MEIN1      Sample Name: 970837401D      Operator:

Run Time: 08/28/97 13:19:25

Comment: MW1D

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	431.98	1.0613	1.2037	.20919	7.8456	186.01	.30293
SDev	.90	.4164	1.1876	.43454	.6123	.22	.08126
%RSD	.20837	39.237	98.663	207.72	7.8042	.11920	26.824
#1	431.08	1.5048	.58718	-.23234	8.4135	185.75	.39668
#2	432.88	1.0004	2.5728	.22353	7.9264	186.13	.25940
#3	431.98	.67869	.45114	.63639	7.1970	186.14	.25271

Errors	LC Pass						
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.10037	13968.	4.5625	9.8530	6.5466	9585.2	19236.
SDev	.09799	9.	.2201	.1307	.1028	5.0	41.
%RSD	97.629	.06745	4.8231	1.3267	1.5707	.05234	.21443
#1	.11582	13958.	4.5991	10.004	6.6350	9585.8	19188.

#2	.18971	13975.	4.7621	9.7827	6.4338	9579.9	19261.
#3	-.00443	13972.	4.3265	9.7725	6.5711	9589.9	19257.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	397.55	385.95	19.951	28493.	.02206	33663.	.52001
SDev	.05	4.26	.160	160.	.12937	281.	2.0205
ZRSD	.01359	1.1043	.79997	.56316	586.45	.83448	388.55
#1	397.61	385.87	19.981	28308.	.06016	33339.	-.46708
#2	397.53	390.25	20.094	28599.	.12810	33833.	-.81718
#3	397.50	381.73	19.779	28572.	-.12208	33817.	2.8443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.0
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	13.491	25.549	10.914	8.0388	199.67	-2.2644	4.2543
SDev	.034	.058	.408	.1045	.11	1.1733	.0529
ZRSD	.25003	.22865	3.7345	1.3001	.05603	51.817	1.2426
#1	13.452	25.497	11.379	7.9181	199.57	-1.5060	4.2828
#2	13.513	25.612	10.749	8.0995	199.65	-3.6159	4.2867
#3	13.507	25.539	10.615	8.0987	199.80	-1.6713	4.1933
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	89.487	.80985	-.09081	.00223	1.5899	-.94627	2.2769
SDev	.429	.41339	.44709	.71153	.2941	2.05609	1.1185
ZRSD	.47928	51.046	492.31	31911.	18.497	217.28	49.125
#1	88.993	.36652	-.53145	.65674	1.9281	-3.0484	2.4021
#2	89.708	.87824	-.10347	.10509	1.4472	1.0605	3.3276
#3	89.761	1.1848	.36247	-.75513	1.3944	-.85093	1.1011
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	10885.						
SDev	34.						
ZRSD	.31270						
#1	10846.						
#2	10906.						

#3 10905.

Errors NOCHECK  
Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	90239	296227	--	--	--	--
SDev	--	544.4045	1740.199	--	--	--	--
%RSD	--	.6032941	.5874544	--	--	--	--
#1	--	89654	294353	--	--	--	--
#2	--	90331	296536	--	--	--	--
#3	--	90731	297792	--	--	--	--

Method: MEIN1 Sample Name: 970837401L 5X Operator:

Run time: 08/28/97 13:27:59

Comment: MW1L

Mode: CONC Corr. Factor: 1

Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	87.246	.03290	.71218	1.2203	2.3051	33.099	.20721
SDev	2.286	.58497	2.3495	.7759	1.2113	.028	.13930
D	2.6205	1777.9	329.90	63.586	52.548	.08556	67.229
#1	88.762	-.51073	-1.8759	1.1680	.92987	33.116	.36640
#2	88.359	-.04246	1.3017	2.0210	3.2135	33.115	.14758
#3	84.616	.65191	2.7107	.47182	2.7720	33.067	.10764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.01836	2501.1	.95788	1.9840	1.7524	1721.0	3394.7
SDev	.06699	1.7	.32944	.1459	.1022	4.0	2.3
%RSD	364.89	.06651	34.393	7.3558	5.8330	.23245	.06810
#1	-.09558	2501.2	1.2915	2.1395	1.6443	1716.8	3392.1
#2	.02418	2499.4	.94937	1.8500	1.8475	1721.2	3396.7
#3	.01632	2502.7	.63278	1.9626	1.7655	1724.8	3395.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	74.870	76.346	5.8257	4315.4	.05146	5464.9	-.47513
SDev	.133	8.274	.2116	24.4	.30672	75.5	.59276
%RSD	.17717	10.837	3.6317	.56611	596.08	1.3816	124.76

#1	74.969	85.785	6.0640	4331.3	.39313	5551.1	.15387
#2	74.719	70.350	5.6600	4327.6	-.20013	5410.4	-1.0234
#3	74.921	72.904	5.7531	4287.3	-.03863	5433.1	-.55588
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2.4423	7.3396	2.5673	1.3756	35.478	-1.7798	.73113
SDev	.2817	.0407	.6902	.0647	.033	1.0171	.04915
%RSD	11.534	.55425	26.885	4.7044	.09327	57.146	6.7225
#1	2.7676	7.3775	2.1206	1.4456	35.514	-.60819	.72299
#2	2.2789	7.3447	3.3623	1.3634	35.470	-2.4360	.68656
#3	2.2805	7.2966	2.2191	1.3179	35.449	-2.2953	.78384
Errors	LC Pass	LC Pa					
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	16.589	1.0599	1.3002	-.10081	.09949	-2.8054	2.4682
SDev	.256	1.3909	1.0226	2.03383	.97000	2.2310	2.4548
%RSD	1.5462	131.23	78.645	2017.5	974.96	79.528	99.458
#1	16.883	-.38462	1.9430	.20817	-.86982	-5.3762	-.12855
#2	16.469	2.3901	1.8366	-2.2714	1.0702	-1.6640	2.7823
#3	16.414	1.1741	.12107	1.7608	.09810	-1.3759	4.7508
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
ELEM	Si2881						
Units	ug/l						
Avg	1917.1						
SDev	3.5						
%RSD	.18170						
#1	1915.9						
#2	1921.1						
#3	1914.5						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
ELEM	--	Sc	Y	--	--	--	--
/len	--	361.384	371.030	--	--	--	--
Avg	--	89761	295433	--	--	--	--

SDev	--	165.7347	504.4366	--	--	--	--
%RSD	--	.1846400	.1707447	--	--	--	--
	--	89575	294871	--	--	--	--
#2	--	89893	295846	--	--	--	--
#3	--	89815	295583	--	--	--	--

Method: MEIN1 Sample Name: 970837402 Operator:  
Run Time: 08/28/97 13:36:31  
Comment: BKGDMW1  
Mode: CONC Corr. Factor: 1

Avg	12.846	26.880	12.080	7.9997	197.84	.08807	3.3055
SDev	.061	.039	.367	.0529	.17	2.1233	.0427
%RSD	.47641	.14653	3.0380	.66130	.08532	2411.0	1.2907

#1	12.915	26.923	11.750	7.9403	197.73	-2.0647	3.3224
#2	12.799	26.871	12.475	8.0418	198.03	.14830	3.2569
#3	12.824	26.846	12.014	8.0171	197.76	2.1806	3.3370

Errors	LC Pass						
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000

ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	94.208	1.5447	2.0557	-1.1076	.87123	-3.0418	1.8465
SDev	.204	1.3068	.7890	.4808	.66201	2.3929	2.3164
%RSD	.21622	84.599	38.378	43.404	75.985	78.667	125.45

#1	94.105	2.7597	2.1198	-1.0108	.10731	-5.4684	4.5122
#2	94.443	1.7120	1.2367	-.68270	1.2294	-.68419	.70366
#3	94.077	.16230	2.8107	-1.6295	1.2770	-2.9727	.323

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

ELEM	Si2881						
Units	ug/l						
Avg	10891.						
SDev	28.						
%RSD	.25326						

#1	10860.						
#2	10912.						
#3	10902.						

Errors	NOCHECK						
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
ELEM	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	90309	296396	--	--	--	--
SDev	--	555.6267	1726.045	--	--	--	--
%RSD	--	.6152506	.5823435	--	--	--	--

#1	--	89680	294446	--	--	--	--
#2	--	90514	297016	--	--	--	--
#3	--	90733	297727	--	--	--	--

Method: MEIN1      Sample Name: 970837403  
 R Time: 08/28/97 13:45:03

Operator:

Comment: MW1D

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	296.98	.51877	-.28376	.02204	1.4867	210.13	.41867
SDev	1.79	.65963	1.63039	.38894	1.4626	.04	.09363
%RSD	.60344	127.15	574.56	1764.7	98.374	.01971	22.364
#1	298.87	.41038	-.36967	-.42062	2.3303	210.16	.52634
#2	296.76	-.07996	1.3879	.30904	-.20208	210.14	.37332
#3	295.30	1.2259	-1.8695	.17769	2.3320	210.08	.35635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.10017	17074.	3.3464	.92377	18.447	5503.4	21237.
SDev	.04563	24.	.2308	.18682	.132	6.8	32.
%RSD	45.550	.13777	6.8965	20.223	.71648	.12364	.15270
#1	.06594	17051.	3.4073	.97266	18.522	5498.3	21200.
#2	.08261	17073.	3.0912	.71737	18.294	5511.1	21257.
#3	.15197	17098.	3.5406	1.0813	18.524	5500.8	21255.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	486.30	478.21	2.5741	29138.	-.14202	23081.	-.61712
SDev	.18	.55	.1882	75.	.17140	120.	2.52042
%RSD	.03767	.11561	7.3109	.25762	120.69	.52142	408.41
#1	486.18	478.25	2.7848	29061.	-.15900	22953.	-2.7877
#2	486.22	477.65	2.4227	29211.	.03724	23099.	2.1471
#3	486.51	478.75	2.5148	29143.	-.30430	23192.	-1.2108
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	6.0647	38.958	2.1399	9.4407	222.66	.18049	2.8629
SDev	.0568	.064	.1813	.0274	.07	.48139	.0264
%RSD	.93735	.16451	8.4723	.28982	.03258	266.72	.92259
#1	6.0245	38.990	2.1413	9.4093	222.58	-.35994	2.8927
#2	6.0399	38.999	1.9579	9.4598	222.72	.33806	2.8539
#3	6.1298	38.884	2.3204	9.4529	222.68	.56334	2.8422
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000

<b>Elem</b>	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
<b>Units</b>	ug/l						
<b>Avg</b>	84.339	.03674	.01458	.68992	.43312	.11239	-.48167
<b>SDev</b>	.440	1.1588	.41534	.77632	1.1846	2.7761	2.14176
<b>ZRSD</b>	.52167	3153.6	2849.6	112.52	273.50	2470.1	444.65

#1	84.230	-1.0958	-.08366	-.09259	.66128	2.8354	-1.9699
#2	84.823	-.01408	.47023	1.4599	-.84893	.21562	1.9730
#3	83.963	1.2201	-.34284	.70243	1.4870	-2.7139	-1.4481

<b>Errors</b>	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
<b>High</b>	25000.						
<b>Low</b>	-100.00						

<b>Elem</b>	Si2881						
<b>Units</b>	ug/l						
<b>Avg</b>	9871.1						
<b>SDev</b>	18.9						
<b>ZRSD</b>	.19096						

#1	9849.3						
#2	9882.1						
#3	9881.9						

<b>Errors</b>	NOCHECK						
<b>High</b>							
<b>Low</b>							

<b>IntStd</b>	1	2	3	4	5	6	7
<b>Node</b>	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
<b>Elem</b>	--	Sc	Y	--	--	--	--
<b>Wavlen</b>	--	361.384	371.030	--	--	--	--
<b>Avg</b>	--	89646	294615	--	--	--	--
<b>SDev</b>	--	425.2415	1332.014	--	--	--	--
<b>ZRSD</b>	--	.4743546	.4521196	--	--	--	--
#1	--	89177	293151	--	--	--	--
#2	--	89756	294940	--	--	--	--
#3	--	90006	295755	--	--	--	--

Method: MEIN1      Sample Name: 970837405      Operator:

Run Time: 08/28/97 13:53:36

Comment: MW03

Mode: CONC    Corr. Factor: 1

<b>Elem</b>	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
<b>Units</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>Avg</b>	2894.5	8.1239	.34480	1.0282	19.474	82.319	.83166
<b>SDev</b>	1.5	.8292	.53598	.9510	.226	.073	.14382
<b>ZRSD</b>	.05192	10.207	155.45	92.490	1.1602	.08884	17.294
#1	2893.4	9.0799	.60285	1.2299	19.229	82.346	.99716
#2	2896.2	7.6921	.70294	1.8622	19.674	82.236	.73700
#3	2893.8	7.5997	-.27139	-.00744	19.519	82.375	.76081



High 25000.  
Low -100.00

Elem Si2881  
Units ug/l  
Avge 10665.  
SDev 13.  
%RSD .11860

#1 10651.  
#2 10676.  
#3 10668.

Errors NOCHECK

High  
Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	90587	296563	--	--	--	--
SDev	--	132.4349	397.2182	--	--	--	--
%RSD	--	.1461964	.1339404	--	--	--	--
#1	--	90440	296137	--	--	--	--
#2	--	90624	296630	--	--	--	--
#3	--	90697	296923	--	--	--	--

Method: MEIN1

Sample Name: 970843715

Operator:

Run Time: 08/28/97 14:02:08

Comment: MW2

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	2619.6	3.4395	-1.6290	1.6641	13.662	253.90	.63183
SDev	13.7	1.0399	1.2430	.1457	.264	.21	.09765
%RSD	.52126	30.234	76.307	8.7544	1.9290	.08149	15.455
#1	2603.8	4.6246	-3.0643	1.5016	13.742	253.67	.73836
#2	2627.3	2.6793	-.92168	1.7075	13.876	253.93	.61055
#3	2627.7	3.0146	-.90101	1.7831	13.368	254.08	.54657
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-67.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.64870	22695.	8.2450	3.2361	10.746	68744.	29872.
SDev	.03634	17.	.1443	.3105	.191	28.	73.
%RSD	5.6027	.07477	1.7506	9.5959	1.7794	.04021	.24549
#1	.61745	22677.	8.3953	3.5899	10.938	68715.	29788.
#2	.68858	22710.	8.2320	3.1091	10.744	68745.	29913.

#3	.64007	22697.	8.1075	3.0091	10.556	68770.	29916.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem Units	Mn2576 ug/l	Mn3441 ug/l	Ni2316 ug/l	K_7664 ug/l	Ag3280 ug/l	Na3302 ug/l	Tl1908 ug/l
Avg	379.43	371.88	4.3701	16308.	.09648	66740.	-.68486
SDev	.26	3.83	.2273	119	.16887	626.	1.22025
%RSD	.06797	1.0296	5.2016	.73261	.175.04	.93743	178.18
#1	379.63	375.86	4.1099	16171.	-.04286	66018.	-1.9027
#2	379.53	371.56	4.4705	16365.	.04801	67083.	.53779
#3	379.14	368.22	4.5300	16388.	.28429	67119.	-.68967
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem Units	V_2924 ug/l	Zn2138 ug/l	Mo2020 ug/l	Li6707 ug/l	Sr4215 ug/l	Sn1899 ug/l	Tl3349 ug/l
Avg	15.730	20.418	1.2680	5.7063	303.26	1.5357	20.770
SDev	.275	.130	.2100	.0760	.17	1.1523	.041
%RSD	1.7475	.63539	16.559	1.3318	.05468	75.033	.19671
#1	15.637	20.269	1.4631	5.6197	303.07	2.8650	20.739
#2	15.514	20.487	1.2952	5.7378	303.37	.82094	20.816
	16.039	20.499	1.0458	5.7616	303.35	.92115	20.754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avg	86.089	1.5762	1.7078	4.1944	3.0624	-3.9314	-.47966
SDev	.346	1.7712	.6739	2.2190	.5110	1.2668	2.13174
%RSD	.40217	112.37	39.462	52.905	16.685	32.223	444.43
#1	85.819	-.46827	2.4850	6.7562	3.5602	-3.5032	-2.8453
#2	85.970	2.5543	1.2846	2.9595	2.5392	-5.3568	1.2924
#3	86.480	2.6427	1.3538	2.8676	3.0879	-2.9341	.11389
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem Units	Si2881 ug/l						
Avg	10508.						
SDev	40.						
%RSD	.38398						
#1	10461.						
#2	10528.						
#3	10534.						

Errors NOCHECK

High

Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgae	--	88447	290127	--	--	--	--
SDev	--	395.0726	1225.863	--	--	--	--
ZRSD	--	.4466789	.4225269	--	--	--	--
#1	--	87995	288733	--	--	--	--
#2	--	88617	290609	--	--	--	--
#3	--	88728	291038	--	--	--	--

Method: MEIN1      Sample Name: 970846603

Operator:

Run Time: 08/28/97 14:10:40

Comment: MW08B

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	3396.6	4.8964	-.22659	.60887	3.1904	105.88	.58370
SDev	4.7	.3510	1.14199	.84833	1.5705	.12	.12359
ZRSD	.13941	7.1684	503.99	139.33	49.228	.11278	21.173
#1	3401.9	5.0436	-1.3230	1.5827	1.4861	106.00	.72627
#2	3392.9	5.1499	-.31286	.03011	3.5055	105.86	.51779
#3	3395.0	4.4958	.95609	.21381	4.5794	105.76	.50704
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000,	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	.12484	57525.	23.129	13.781	15.922	5912.6	8706.8
SDev	.07543	122.	.093	.223	.253	12.0	7.0
ZRSD	60.423	.21181	.40112	1.6189	1.5904	.20363	.08038
#1	.14462	57400.	23.119	13.981	16.091	5899.5	8702.1
#2	.04149	57533.	23.042	13.540	15.631	5915.0	8703.5
#3	.18841	57643.	23.227	13.821	16.044	5923.2	8714.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	395.46	388.50	19.220	2635.8	.14275	10537.	-.52627
SDev	.53	4.88	.405	21.7	.27120	76.	.84235
RSD	.13293	1.2549	2.1069	.82149	189.98	.71871	160.06

#1	394.98	392.75	19.415	2654.8	.40837	10621.	.31564
#2	395.37	383.18	18.754	2612.2	.15359	10475.	-1.3690
"	396.02	389.58	19.490	2640.3	-.13371	10515.	-.52540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	5.8116	27.537	3.1664	6.9324	219.47	16.868	44.357
SDev	.2037	.151	.6197	.0833	.13	1.901	.178
%RSD	3.5049	.54968	19.571	1.2012	.06000	11.271	.40226
#1	5.9679	27.378	3.2073	7.0280	219.60	19.042	44.454
#2	5.8856	27.556	3.7646	6.8759	219.48	16.045	44.151
#3	5.5813	27.679	2.5273	6.8933	219.34	15.517	44.466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avge	31.297	-.36366	1.0943	4.6495	5.0196	-2.2950	.80596
SDev	.459	2.22979	2.3753	1.4523	.7506	.5332	1.8751
%RSD	1.4676	613.14	217.07	31.235	14.954	23.233	232.66
#1	31.139	-2.8310	3.7861	6.3242	4.4041	-2.2890	-.84086
#2	30.937	1.5072	-.70746	3.7357	5.8558	-1.7649	.41193
#3	31.814	.23279	.20422	3.8887	4.7988	-2.8313	2.8468
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avge	8826.9						
SDev	5.9						
%RSD	.06708						
#1	8831.4						
#2	8820.2						
#3	8829.1						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
em	--	Sc	Y	--	--	--	--
wavlen	--	361.384	371.030	--	--	--	--
Avge	--	89497	294745	--	--	--	--
SDev	--	232.2872	730.5252	--	--	--	--

ZRSD	--	.2595484	.2478499	--	--	--	--
#1	--	89258	294011	--	--	--	--
#2	--	89722	295472	--	--	--	--
#3	--	89510	294752	--	--	--	--

Method: MEIN1      Sample Name: 970846603S      Operator:  
Run Time: 08/28/97 14:19:12  
Comment: MW08BS  
Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	6370.8	463.62	1877.8	471.89	1872.3	1933.7	46.446
SDev	11.8	.28	2.5	.37	5.7	1.2	.134
ZRSD	.18457	.06143	.13178	.07751	.30669	.05957	.28853
#1	6358.7	463.70	1878.5	471.62	1874.7	1932.5	46.587
#2	6371.7	463.86	1879.9	471.75	1865.7	1933.7	46.3
#3	6382.1	463.31	1875.1	472.31	1876.4	1934.8	46.429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	45.203	82032.	205.65	465.99	254.18	7212.5	27864.
SDev	.293	26.	.43	.42	.74	5.9	27.
ZRSD	.64906	.03129	.20876	.09078	.29009	.08195	.09755
#1	45.219	82032.	206.14	466.24	253.45	7219.1	27832.
#2	44.901	82057.	205.37	465.50	254.17	7207.7	27879.
#3	45.487	82006.	205.43	466.22	254.93	7210.5	27880.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	885.12	875.76	479.46	25065.	47.508	31320.	1868.3
SDev	.37	4.57	.49	70.	.121	49.	2.5
ZRSD	.04140	.52227	.10295	.27947	.25380	.15525	.13275
#1	885.43	878.41	479.29	24989.	47.641	31293.	1866.7
#2	884.72	870.48	479.07	25078.	47.405	31376.	1867.1
#3	885.22	878.40	480.02	25127.	47.480	31290.	1871.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	466.11	488.79	925.23	1440.5	1161.9	985.09	946.93

SDev	.42	.29	3.18	1.9	.4	4.28	.77
%RSD	.09061	.05922	.34327	.13027	.03372	.43473	.08162
#1	465.76	488.74	922.10	1439.6	1161.5	982.03	946.20
#2	466.58	488.52	925.13	1439.3	1162.3	983.27	946.86
#3	466.00	489.10	928.45	1442.7	1162.0	989.99	947.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	996.48	473.15	471.26	460.49	465.19	1868.0	1882.8
SDev	2.45	.46	.56	2.00	.85	5.8	4.2
%RSD	.24612	.09811	.11822	.43391	.18333	.31106	.22159
#1	994.60	472.69	471.08	462.68	464.21	1874.7	1880.3
#2	995.60	473.62	470.82	460.02	465.78	1864.7	1887.6
#3	999.26	473.15	471.89	458.77	465.57	1864.7	1880.3
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	12000.						
ey	12.						
%RSD	.10057						
#1	11987.						
#2	12004.						
#3	12010.						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88738	291670	--	--	--	--
SDev	--	158.1339	481.0056	--	--	--	--
%RSD	--	.1782038	.1649141	--	--	--	--
#1	--	88560	291121	--	--	--	--
#2	--	88863	292016	--	--	--	--
#3	--	88790	291874	--	--	--	--

Method: MEIN1      Sample Name: 970846603D  
Run Time: 08/28/97 14:27:43  
Comment: MW08BD

Operator:

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	3436.7	4.2397	- .48047	.31002	2.9341	107.51	.57132
SDev	14.2	.7179	1.90181	.43368	1.1469	.12	.09710
ZRSD	.41197	16.932	395.82	47.657	39.090	.11548	16.996
#1	3452.5	3.7388	-2.6760	.40942	3.5986	107.66	.68341
#2	3425.2	5.0622	.57796	1.1720	3.5939	107.44	.51303
#3	3432.3	3.9183	.65665	1.1486	1.6097	107.44	.51751
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.00410	59104.	23.164	14.262	17.549	5892.6	8919.2
SDev	.05716	164.	.211	.355	.244	14.5	4.2
ZRSD	1394.2	.27720	.91289	2.4918	1.3911	.24653	.0471
#1	.02339	58916.	23.389	14.478	17.786	5879.3	8924.0
#2	.03412	59185.	22.969	13.852	17.298	5890.3	8917.7
#3	-.06981	59212.	23.133	14.456	17.563	5908.1	8915.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	400.56	389.79	20.434	2707.0	.35848	10819.	-.50986
SDev	.51	2.80	.440	21.5	.23814	120.	2.89962
ZRSD	.12741	.71784	2.1529	.79393	66.430	1.1112	568.71
#1	399.98	392.41	20.064	2731.0	.08350	10951.	.79231
#2	400.81	386.84	20.317	2689.7	.49539	10716.	1.516
#3	400.90	390.13	20.920	2700.1	.49654	10790.	-3.8323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	5.9193	24.039	3.5879	6.9582	224.83	17.852	44.604
SDev	.1731	.018	.4323	.0659	.30	.571	.027
ZRSD	2.9248	.07325	12.048	.94705	.13193	3.1985	.06118
#1	5.7567	24.039	4.0438	7.0336	225.17	17.507	44.630
#2	6.1013	24.021	3.1839	6.9117	224.70	18.511	44.605
#3	5.8998	24.056	3.5359	6.9293	224.62	17.538	44.576
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	39.431	.33621	1.1964	4.1154	4.3017	-4.2899	1.4213
ev	.261	.19332	.6100	1.3267	.5432	1.9982	2.9899
%RSD	.66101	57.501	50.984	32.237	12.628	46.579	210.37

#1	39.701	.23476	.49651	3.7674	3.7244	-4.4128	-1.8090
#2	39.409	.55914	1.4778	5.5814	4.8028	-2.2331	1.9812
#3	39.181	.21473	1.6148	2.9974	4.3779	-6.2238	4.0916

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

Elem	Si2881
Units	ug/l
Avg	8981.7
SDev	20.4
%RSD	.22670

#1 9005.2  
#2 8968.7  
#3 8971.3

Errors NOCHECK  
High  
Low

tStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgc	--	89449	294465	--	--	--	--
SDev	--	217.5898	624.7802	--	--	--	--
%RSD	--	.2432566	.2121749	--	--	--	--
#1	--	89210	293785	--	--	--	--
#2	--	89636	295014	--	--	--	--
#3	--	89500	294595	--	--	--	--

Method: MEIN1      Sample Name: 970846603L\_5X      Operator:

Run Time: 08/28/97 14:36:16

Comment: MW08B1

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	600.78	1.2741	.91739	1.1274	.75640	19.504	.13869
SDev	1.95	.3335	.69778	.8494	.82325	.075	.14087
%RSD	.32505	26.179	76.061	75.343	108.84	.38286	101.57

#1	602.32	1.2515	.94260	1.5816	1.5025	19.585	.30057
	598.58	.95246	1.6022	1.6532	-.12679	19.437	.07146
**	601.43	1.6184	.20735	.14745	.89350	19.492	.04402

Errors LC Pass LC Pass

High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.10364	10714.	4.2522	2.4704	2.1621	1101.3	1603.8
SDev	.13298	30.	.3318	.4003	.0101	7.1	1.7
ZRSD	128.31	.27686	7.8030	16.204	.46600	.64899	.10694
#1	-.04071	10680.	4.5414	2.9311	2.1729	1094.7	1602.8
#2	-.25641	10733.	4.3251	2.2718	2.1530	1100.2	1602.7
#3	-.01380	10730.	3.8899	2.2081	2.1603	1108.9	1605.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Aq3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	73.026	71.041	3.6313	387.58	-.06803	1831.7	.952
SDev	.102	5.691	.4087	13.97	.22299	16.8	1.42
ZRSD	.14003	8.0104	11.256	3.6038	327.79	.91469	149.84
#1	72.925	77.124	3.9493	401.32	.16551	1818.4	1.4115
#2	73.024	70.152	3.1703	388.04	-.27872	1850.5	-.64780
#3	73.130	65.847	3.7742	373.39	-.09087	1826.2	2.0945
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1.0677	5.2592	.61518	1.2986	40.155	2.7799	8.2087
SDev	.0598	.0264	.28344	.0230	.051	.2511	.0143
ZRSD	5.6003	.50225	46.074	1.7720	.12814	9.0343	.17367
#1	1.1049	5.2572	.55508	1.3210	40.210	3.0699	8.2189
#2	.99875	5.2339	.36661	1.2998	40.147	2.6350	8.1924
#3	1.0995	5.2866	.92384	1.2750	40.108	2.6348	8.2148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	5.8325	.51051	1.4353	2.1923	.81557	-.26722	1.5087
SDev	.3997	1.3169	.8873	.1496	.48215	2.46990	.2358
ZRSD	6.8535	257.97	61.819	6.8260	59.118	924.29	15.628
#1	6.2940	.16179	2.2903	2.3531	.70137	-.53854	1.6819
#2	5.5946	1.9667	1.4965	2.0572	.40077	2.3271	1.2402
#3	5.6089	-.59698	.51898	2.1666	1.3446	-2.5903	1.6039
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						

Low -100.00

Sum Si2881  
Avg 1613.3  
SDev 3.0  
%RSD .18327

#1 1615.0  
#2 1609.9  
#3 1615.0

Errors NOCHECK

High

Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wt	--	361.384	371.030	--	--	--	--
Avg	--	94500	311508	--	--	--	--
SDev	--	181.0718	507.1453	--	--	--	--
%RSD	--	.1916104	.1628035	--	--	--	--
#1	--	94293	310935	--	--	--	--
#2	--	94629	311900	--	--	--	--
#3	--	94578	311688	--	--	--	--

Method: MEIN1 Sample Name: CCV4

Operator:

Run Time: 08/28/97 14:44:49

Comment: CCV

Mode: CONC Corr. Factor: 1

Elem	Al3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1013.6	991.83	996.93	1.2615	1001.0	990.98	997.35
SDev	1.0	4.62	4.75	.3773	3.2	1.16	1.90
%RSD	.09611	.46578	.47621	29.911	.32164	.11736	.19023
#1	1014.7	986.86	992.85	.88728	997.54	992.32	995.16
#2	1013.1	995.99	995.79	1.2553	1003.9	990.29	998.41
#3	1013.0	992.65	1002.1	1.6418	1001.5	990.32	998.48

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass
Value	1000.0	1000.0	1000.0		1000.0	1000.0	1000.0
Range	10.490	10.490	10.490		10.490	10.490	10.490

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	990.54	18.007	999.48	988.31	1010.1	959.85	19.207
SDev	3.20	.596	1.66	1.47	2.2	11.68	.523
%RSD	.32323	3.3076	.16621	.14904	.21880	1.2165	2.7245
#1	986.85	18.692	997.56	986.74	1012.6	946.82	18.639
#2	992.56	17.612	1000.4	989.67	1009.5	969.37	19.669
#3	992.21	17.717	1000.5	988.51	1008.3	963.35	19.312

Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	1000.0		1000.0	1000.0	1000.0	1000.0	
Range	10.490		10.490	10.490	10.490	10.490	
ELEM	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1017.6	997.61	1000.6	-23.816	99.292	46.460	979.78
SDev	1.4	2.00	1.5	4.922	.363	37.489	1.82
ZRSD	.14189	.19999	.14602	20.669	.36589	80.691	.18576
#1	1015.9	995.31	999.04	-20.454	98.984	65.264	978.67
#2	1018.6	998.82	1001.9	-21.527	99.693	70.824	978.78
#3	1018.2	998.71	1000.8	-29.466	99.198	3.2907	981.88
Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	1000.0	1000.0	1000.0		100.00		1000.0
Range	10.490	10.490	10.490		10.490		10.490
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti33
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1004.6	991.20	.14226	1017.4	1000.4	.10574	.04710
SDev	1.2	2.68	.92763	3.9	1.0	.38214	.07951
ZRSD	.11959	.27040	652.06	.38081	.09917	361.41	168.82
#1	1003.2	988.11	.59834	1021.5	1001.5	.00959	-.03030
#2	1005.2	992.93	.75356	1017.1	999.79	-.21914	.12856
#3	1005.4	992.54	-.92512	1013.7	999.80	.52676	.04302
Errors	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	NOCHECK	NOCHECK
Value	1000.0	1000.0		1000.0	1000.0		
Range	10.490	10.490		10.490	10.490		
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	.73988	2.0083	.88844	990.33	992.58	987.43	1001.7
SDev	.39751	1.6028	.71989	2.99	5.57	3.66	6.2
ZRSD	53.726	79.809	81.028	.30190	.56089	.37108	.61694
#1	.31706	2.0595	.30189	987.81	986.39	987.77	995.39
#2	1.1060	.38052	1.6918	993.63	997.17	983.61	1001.9
#3	.79660	3.5850	.67161	989.56	994.19	990.92	1007.7
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
ELEM	Si2881						
Units	ug/l						
Avg	3.1409						
SDev	.5631						
ZRSD	17.927						
#1	2.9752						
#2	3.7682						
	2.6792						

Errors NOCHECK

Value  
Range

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgae	--	91210	300787	--	--	--	--
SDev	--	88.57953	369.3675	--	--	--	--
%RSD	--	.0971157	.1228005	--	--	--	--
#1	--	91206	300750	--	--	--	--
#2	--	91124	300437	--	--	--	--
#3	--	91301	301173	--	--	--	--

Method: MEIN1      Sample Name: CCV123

Operator:

Run Time: 08/28/97 14:53:21

Comment: CCV

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	30.256	1.5512	-.35438	983.64	-4.2860	.72875	.97805
SDev	2.120	.7291	2.70708	.83	1.0138	.02034	.15937
%RSD	7.0055	47.001	763.89	.08402	23.653	2.7916	16.294
#1	32.512	2.3332	-3.1650	984.57	-5.3197	.73863	1.1613
#2	29.951	.89000	-.13389	983.34	-3.2935	.70535	.90068
#3	28.306	1.4306	2.2357	983.01	-4.2449	.74226	.87215

Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK
Value				1000.0			
Range				10.490			

ELEM	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	.05022	48052.	1.6723	.03626	.46984	29.087	45632.
SDev	.04787	113.	.4528	.27271	.25413	4.404	33.
%RSD	95.311	.23461	27.076	752.12	54.089	15.140	.07262
#1	.08292	47938.	2.1707	.35113	.73944	32.896	45613.
#2	.07246	48056.	1.2862	-.11715	.43539	24.265	45670.
#3	-.00472	48164.	1.5599	-.12520	.23469	30.099	45613.

Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pass
Value		50000.					50000.
Range		10.490					10.490

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	-.08408	.66982	-.19022	52103.	.17966	48636.	-4.6590
SDev	.03165	5.3003	.1426	149.	.36259	195.	1.5881
%RSD	37.639	791.30	7.4973	.28540	201.82	.40194	34.086
#1	-.06124	6.6201	-1.7396	52205.	.57791	48631.	-3.8018

#2	-.07079	-3.5457	-2.0058	52173.	.09243	48833.	-6.4915
#3	-.12020	-1.0650	-1.9614	51933.	-.13136	48442.	-3.6837
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	OC Pass	NOCHECK
Value				50000.		50000.	
Range				10.490		10.490	
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.22169	.46623	1017.5	1.2834	3.2574	1017.7	1016.2
SDev	.20837	.11755	5.6	.0699	.0329	3.4	.4
ZRSD	93.993	25.213	.54819	5.4505	1.0092	.33834	.03884
#1	.31710	.51023	1013.9	1.2181	3.2941	1013.7	1016.1
#2	.36527	.33303	1014.6	1.2747	3.2475	1019.8	1015.9
#3	-.01731	.55544	1023.9	1.3572	3.2306	1019.5	1016.7
Errors	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	OC Pass	OC Pass
Value			1000.0			1000.0	
Range			10.490			10.490	
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	977.58	981.89	984.51	57412	-.54079	-13.774	6.3453
SDev	1.92	2.67	1.70	1.9348	.13133	5.268	1.4500
ZRSD	.19605	.27202	.17242	33.700	24.284	38.243	22.852
#1	975.51	981.68	986.02	7.8415	-.41711	-19.429	4.9548
#2	979.30	984.66	982.67	4.0316	-.67862	-12.886	6.2327
#3	977.94	979.33	984.84	5.3505	-.52664	-9.0067	7.8483
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1000.0						
Range	10.490						
Elem	Si2881						
Units	ug/l						
Avg	994.52						
SDev	4.63						
ZRSD	.46574						
#1	999.37						
#2	994.07						
#3	990.14						
Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Amplitude	--	86749	285598	--	--	--	--
Count	--	261.5002	876.3928	--	--	--	--
ZRSD	--	.3014434	.3068620	--	--	--	--

#1	--	86479	284700	--	--	--	--
#	--	86768	285644	--	--	--	--
#	--	87001	286451	--	--	--	--

---

Method: MEIN1      Sample Name: BLANK

Operator:

Run Time: 08/28/97 15:01:53

Comment: CCB

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	4.7285	-.42019	-.49165	1.5494	-.55464	.26224	.19701
SDev	1.5557	.44103	1.29082	.3876	.97643	.02091	.12887
%RSD	32.902	104.96	262.55	25.014	176.05	7.9752	65.413

#1	5.8921	-.36055	.84540	1.1336	.36959	.26367	.34568
#2	5.3319	-.88801	-.58971	1.6139	-.45751	.28241	.11727
#3	2.9614	-.01202	-1.7306	1.9006	-1.5760	.24065	.12807

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.04276	1.4738	.09904	-.14202	-.24322	-2.3062	19.681
SDev	.04036	.3787	.34218	.30618	.19656	.7605	2.018
%RSD	94.399	25.693	345.49	215.59	80.817	32.974	10.254

#1	.06077	1.8856	.46662	.20505	-.39383	-3.1843	18.393
#2	.07099	1.1406	.04077	-.25719	-.02086	-1.8564	22.006
#3	-.00347	1.3952	-.21026	-.37391	-.31498	-1.8781	18.643

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.22486	-4.1632	-.02418	-14.614	-.19810	-60.107	.36582
SDev	.01994	6.4297	.13786	26.855	.24697	38.396	2.0685
%RSD	8.8688	154.44	570.05	183.77	124.67	63.880	565.44

#1	-.24327	3.0072	-.15971	14.764	.07808	-56.951	.26441
#2	-.20367	-6.0807	.11591	-20.702	-.27468	-99.984	-1.6501
#3	-.22763	-9.4160	-.02876	-37.902	-.39772	-23.386	2.4831

Errors	OC Pass						
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.10534	-.67185	.77938	.44104	.10503	-.90050	.31380
SDev	.24038	.13748	1.0625	.08442	.02094	1.12343	.07457

ZRSD	228.20	20.463	136.33	19.141	19.940	124.76	23.763
#1	.15710	-.65030	.38131	.53674	.12801	-.68872	.27892
#2	-.15827	-.54642	-.02662	.40919	.10003	.10196	.39941
#3	-.31484	-.81884	1.9834	.37717	.08703	-2.1148	.26306
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	.99551	1.4661	1.5908	-.14206	-.55922	-1.2490	-.11365
SDev	.22793	1.3559	.7742	1.89152	.58923	3.7596	1.83326
ZRSD	22.895	92.480	48.669	1331.5	105.37	301.00	1613.1
#1	1.2477	.54218	1.4287	1.3996	-1.2395	2.4629	.03774
#2	.80410	3.0227	.91045	-2.2528	-.20681	-5.0545	1.6392
#3	.93479	.83352	2.4333	.42703	-.23138	-1.1555	-2.0179
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.00000						
Range	100.00			—			
ELEM	Si2881						
Units	ug/l						
Avg	-1.4973						
SDev	1.0165						
ZRSD	67.886						
#1	-1.8120						
#2	-.36074						
#3	-2.3193						
Errors	NOCHECK						
Value							
Range							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
ELEM	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	91463	302710	--	--	--	--
SDev	--	177.9616	576.8882	--	--	--	--
ZRSD	--	.1945729	.1905745	--	--	--	--
#1	--	91269	302070	--	--	--	--
#2	--	91500	302870	--	--	--	--
#3	--	91619	303190	--	--	--	--

Method: MEIN1      Sample Name: 970846013  
Run Time: 08/28/97 15:10:24  
Comment: MW19  
M : CONC   Corr. Factor: 1

Operator:

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	263.11	1.9412	.50105	.91051	1.4560	65.570	.39853
%RSD	1.61	.1638	1.62414	.39805	1.8432	.087	.10534
#1	264.80	1.9780	.41505	.85332	3.4608	65.664	.51931
#2	261.61	1.7621	.45807	.54416	1.0723	65.556	.32566
#3	262.93	2.0834	-2.3763	1.3341	-.16525	65.492	.35063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.00866	25547.	8.7747	30.932	10.227	15521.	7782.2
SDev	.14792	62.	.1674	.176	.114	23.	9.6
%RSD	1708.1	.24393	1.9083	.57032	1.1152	.14904	.12342
#1	.10859	25476.	8.9512	31.098	10.275	15519.	7771.2
#2	-.16126	25579.	8.6180	30.950	10.308	15546.	7788.9
#3	.07865	25588.	8.7551	30.747	10.096	15499.	7786.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	240.04	233.86	15.693	450.69	1.1557	7392.1	-.27523
SDev	.30	4.16	.214	16.24	.0672	75.6	1.87496
%RSD	.12404	1.7775	1.3653	3.6025	5.8180	1.0233	681.22
#1	239.69	236.81	15.676	468.65	1.2259	7460.3	-2.3228
#2	240.17	235.67	15.916	446.37	1.1493	7310.8	.13948
#3	240.24	229.11	15.488	437.05	1.0919	7405.4	1.3577
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	-.00306	75.221	2.9323	3.2185	276.42	-.19161	2.8646
SDev	.06148	.203	.3610	.0394	.21	1.17130	.0441
%RSD	2008.4	.27007	12.311	1.2248	.07482	611.28	1.5385
#1	.03038	75.078	2.5891	3.2559	276.66	-1.5390	2.8941
#2	.03445	75.133	2.8991	3.2223	276.28	.58381	2.8858
#3	-.07401	75.454	3.3087	3.1773	276.33	.38035	2.8140
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2

Units	ug/l						
Avg	54.434	.56291	1.0839	2.6106	1.6067	-4.0740	1.2826
SDev	.283	1.4129	.5717	.6156	.3745	2.6786	2.4340
%RSD	.52039	251.00	52.748	23.582	23.306	65.748	189.77
#1	54.757	1.6986	.43119	1.9299	2.0018	-6.2526	3.7437
#2	54.319	-1.0193	1.3246	2.7735	1.2570	-1.0834	1.2275
#3	54.227	1.0094	1.4960	3.1284	1.5615	-4.8861	-1.1234
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	2677.3						
SDev	.8						
%RSD	.03107						
#1	2676.6						
#2	2678.2						
#3	2676.9						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
em	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88969	293407	--	--	--	--
SDev	--	231.1846	692.2950	--	--	--	--
%RSD	--	.2598475	.2359507	--	--	--	--
#1	--	88733	292703	--	--	--	--
#2	--	88980	293430	--	--	--	--
#3	--	89195	294087	--	--	--	--

Method: MEIN1      Sample Name: 970846013S      Operator:

Run Time: 08/28/97 15:18:57

Comment: MW19

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	2262.0	468.77	1901.1	484.75	1893.8	1935.9	47.203
SDev	1.2	1.19	3.0	1.09	3.9	1.8	.127
%RSD	.05481	.25392	.15994	.22451	.20433	.09246	.26939
#1	2263.3	467.64	1903.2	483.64	1894.8	1937.7	47.345
#2	2261.9	468.67	1902.6	485.82	1889.5	1935.9	47.163
#3	2260.8	470.01	1897.6	484.79	1897.1	1934.1	47.100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.

Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem Units	Cd2265 ug/l	Ca3179 ug/l	Cr2677 ug/l	Co2286 ug/l	Cu3247 ug/l	Fe2714 ug/l	Mg2790 ug/l
Avg	46.298	47061.	195.30	496.05	253.10	18501.	27017.
SDev	.042	134.	.10	.42	.21	11.	30.
%RSD	.09177	.28481	.05289	.08430	.08383	.05926	.11052
#1	46.250	46917.	195.38	495.59	253.13	18502.	26983.
#2	46.330	47083.	195.18	496.40	252.87	18489.	27028.
#3	46.315	47182.	195.33	496.17	253.29	18511.	27039.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem Units	Mn2576 ug/l	Mn3441 ug/l	Ni2316 ug/l	K_7664 ug/l	Ag3280 ug/l	Na3302 ug/l	Tl1908 ug/l
Avg	733.82	722.25	487.40	22814.	53.632	27955.	1903.2
SDev	.89	3.54	.71	.23.	.153	.50.	5.2
%RSD	.12114	.49018	.14668	.09941	.28546	.17968	.27358
#1	732.82	726.24	487.41	22840.	53.750	27909.	1898.9
#2	734.13	721.02	486.68	22805.	53.459	28009.	1909.0
#3	734.51	719.49	488.11	22797.	53.688	27948.	1901.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem Units	V_2924 ug/l	Zn2138 ug/l	Mo2020 ug/l	Li6707 ug/l	Sr4215 ug/l	Sn1899 ug/l	Tl3349 ug/l
Avg	470.50	553.46	947.61	1411.5	1240.2	978.83	942.45
SDev	.53	.32	.53	5.4	.5	1.94	.47
%RSD	.11329	.05807	.05611	.38528	.04421	.19796	.05006
#1	470.28	553.81	947.00	1417.5	1240.6	981.05	942.40
#2	470.11	553.17	947.81	1410.1	1240.3	977.50	942.01
#3	471.11	553.42	948.00	1406.9	1239.6	977.95	942.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avg	1020.2	484.07	485.09	466.59	469.86	1887.4	1908.0
SDev	.3	2.78	.77	1.51	1.36	9.1	2.2
%RSD	.02941	.57348	.15814	.32293	.28884	.48289	.11564
#1	1019.9	480.86	485.03	466.26	468.33	1896.8	1906.3
#2	1020.5	485.68	485.89	465.27	470.36	1886.7	1910.5
#3	1020.2	485.66	484.35	468.23	470.90	1878.6	1907.1
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

**ELEM** Si2881  
**UNITS** ug/l  
**AvgE** 3965.5  
**SDev** 1.1  
**ZRSD** .02758

**#1** 3965.6  
**#2** 3966.5  
**#3** 3964.3

**Errors** NOCHECK  
**High**  
**Low**

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
<b>ELEM</b>	--	Sc	Y	--	--	--	--
<b>Wavlen</b>	--	361.384	371.030	--	--	--	--
<b>AvgE</b>	--	88418	291206	--	--	--	--
<b>SDev</b>	--	205.0471	560.6880	--	--	--	--
<b>ZRSD</b>	--	.2319074	.1925400	--	--	--	--
<b>#1</b>	--	88185	290575	--	--	--	--
<b>#2</b>	--	88572	291647	--	--	--	--
<b>#3</b>	--	88496	291396	--	--	--	--

**Method:** MEIN1    **Sample Name:** 970846013D    **Operator:**  
**Run Time:** 08/28/97 15:27:30  
**Comment:** MW19  
**Mode:** CONC    **Corr. Factor:** 1

<b>ELEM</b>	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
<b>UNITS</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>AvgE</b>	237.81	1.8131	-1.7371	1.5651	1.0111	60.869	.29461
<b>SDev</b>	2.87	.6363	.3220	.8491	.9003	.010	.11239
<b>ZRSD</b>	1.2049	35.092	18.534	54.254	89.039	.01647	38.147
<b>#1</b>	237.78	1.0895	-1.5144	2.5375	1.8828	60.859	.42003
<b>#2</b>	240.69	2.0648	-2.1062	.97019	.08471	60.879	.26078
<b>#3</b>	234.96	2.2850	-1.5907	1.1875	1.0658	60.868	.20303
<b>Errors</b>	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
<b>High</b>	600000.	100000.	100000.	100000.	10000.	70000.	10000.
<b>Low</b>	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
<b>ELEM</b>	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
<b>UNITS</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>AvgE</b>	.00525	23733.	8.6182	28.689	12.169	14545.	7170.6
<b>SDev</b>	.06953	12.	.1396	.215	.152	11.	8.2
<b>ZRSD</b>	1324.7	.05041	1.6196	.74843	1.2518	.07573	.11392
<b>#1</b>	-.03479	23732.	8.4590	28.784	12.035	14532.	7165.3
<b>#2</b>	-.03500	23746.	8.7196	28.839	12.137	14551.	7166.5
<b>#3</b>	.08553	23722.	8.6760	28.443	12.335	14552.	7180.0

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
'	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	222.77	217.93	14.593	423.01	4.8037	6827.6	1.0317
SDev	.04	2.43	.348	13.45	.1741	31.2	.2990
%RSD	.01760	1.1145	2.3866	3.1793	3.6245	.45746	28.980
#1	222.75	216.74	14.196	419.74	4.6036	6810.4	.71759
#2	222.82	220.72	14.849	437.79	4.9204	6863.6	1.0646
#3	222.75	216.32	14.733	411.50	4.8871	6808.7	1.3128
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.00496	69.634	4.9090	3.0287	253.55	.69154	3.0615
SDev	.21554	.101	.3067	.0363	.05	2.4553	.0334
%RSD	4348.5	.14519	6.2480	1.1996	.02159	355.04	1.0894
#1	-.25384	69.548	4.5602	2.9902	253.57	-1.0231	3.0422
#2	.11983	69.745	5.1369	3.0624	253.49	3.5042	3.1000
#3	.11913	69.610	5.0298	3.0336	253.59	-.40644	3.0424
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	43.227	1.0425	1.8259	1.6705	1.8841	-5.1415	-.03759
SDev	.316	1.6011	.5413	.9564	.4877	1.3571	.96126
%RSD	.73162	153.59	29.644	57.251	25.883	26.396	2557.4
#1	43.207	2.7533	2.4296	.62510	1.3211	-6.6476	1.0482
#2	43.553	-.4169	1.6640	1.8850	2.1544	-4.7632	-.77988
#3	42.922	.79374	1.3840	2.5014	2.1767	-4.0136	-.38113
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	2485.9						
SDev	1.7						
%RSD	.06880						
#1	2483.9						
#2	2487.0						
#3	2486.8						
Errors	NOCHECK						

High  
Low

	1	2	3	4	5	6	7
IntStd	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Sc	Y	--	--	--	--	--
Elem	--	361.384	371.030	--	--	--	--
Wavlen	--	90065	296798	--	--	--	--
Avgae	--	45.23642	198.4843	--	--	--	--
SDev	--	.0502266	.0668752	--	--	--	--
ZRSD	--	90017	296644	--	--	--	--
#1	--	90107	297022	--	--	--	--
#2	--	90070	296728	--	--	--	--

Method: MEIN1

Sample Name: 970846013L 5X

Operator:

Run Time: 08/28/97 15:36:02

Comment: MW19

Mode: CONC Corr. Factor: 1

Elem	A <sup>1</sup> 3082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	61.250	.28255	.50367	.19240	.61710	13.157	.30487
SDev	2.034	.05937	1.1052	1.3205	.56977	.027	.08942
ZRSD	3.3202	21.012	219.43	686.30	92.330	.20798	29.330
#1	62.906	.32715	1.7798	1.7171	1.2517	13.186	.40608
#2	58.981	.21516	-.12799	-.57587	.14941	13.132	.27195
#3	61.864	.30533	-.14080	-.56405	.45022	13.152	.23658
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	-.03760	5136.2	1.8073	6.0821	1.7390	3133.5	1553.5
SDev	.10147	11.1	.0644	.1185	.3197	7.3	5.3
ZRSD	269.88	.21673	3.5654	1.9475	18.383	.23308	.33814
#1	-.01919	5132.1	1.8737	6.1917	1.9258	3141.0	1554.8
#2	-.14701	5127.8	1.7450	5.9564	1.3699	3126.4	1547.7
#3	.05341	5148.8	1.8031	6.0983	1.9213	3133.0	1557.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000,	625000,	100000,	100000,	100000,	500000,	800000,
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	47.907	46.085	3.2366	59.952	-.03390	1337.2	.54894
SDev	.086	3.343	.0604	17.433	.17142	45.9	1.8187
ZRSD	.17978	7.2550	1.8650	29.078	505.64	3.4351	331.30
I	47.986	46.973	3.2372	61.890	-.15781	1383.6	.62986
L	47.815	42.388	3.1760	41.631	-.10563	1336.3	-1.3088

#3	47.920	48.895	3.2967	76.334	.16173	1291.7	2.3258
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.24791	15.077	1.1185	.74959	54.840	-1.4311	.67126
SDev	.24054	.035	.6721	.04160	.026	1.3996	.15868
%RSD	97.029	.23488	60.091	5.5494	.04822	97.798	23.639
#1	-.19503	15.093	1.8308	.74116	54.869	-1.7038	.63304
#2	-.51049	15.037	1.0293	.71286	54.832	-2.6744	.53518
#3	-.03821	15.103	.49543	.79476	54.818	.08474	.84555
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	10.997	.53965	.01892	-1.8746	1.3594	-1.1353	1.3218
SDev	.383	.59624	1.6964	.2586	.2176	2.8846	1.3739
%RSD	3.4825	110.49	8967.9	13.796	16.006	254.09	103.94
#1	11.149	1.1989	1.9757	-2.0344	1.5060	.92619	2.2058
#2	10.561	.03824	-.88258	-1.5762	1.1094	-4.4318	2.0205
	11.280	.38176	-1.0364	-2.0133	1.4627	.09973	-.26102
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	537.88						
SDev	1.63						
%RSD	.30256						
#1	539.23						
#2	536.07						
#3	538.33						
Errors	NOCHECK						
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
	--	90644	299644	--	--	--	--
SDev	--	298.8818	994.0997	--	--	--	--
%RSD	--	.3297327	.3317606	--	--	--	--

#1	--	90366	298728	--	--	--
#2	--	90960	300701	--	--	--
#3	--	90605	299502	--	--	--

Method: MEIN1      Sample Name: 970846013F

Operator:

Run Time: 08/28/97 15:58:04

Comment: MW19

Code: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	34.286	1.2146	-1.4516	1.3367	1.1132	43.583	.44169
SDev	2.371	.5713	.8403	.9252	.8224	.065	.12468
%RSD	6.9144	47.034	57.885	69.217	73.877	.14821	28.228

#1	36.985	1.4806	-1.5028	1.2860	.34617	43.658	.58480
#2	32.544	.55882	-.58691	.43789	1.0119	43.547	.38370
#3	33.328	1.6044	-2.2651	2.2863	1.9816	43.544	.35656

Errors	LC Pass							
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.	
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000	

Item	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.08437	21668.	1.0062	17.263	11.744	4721.2	4857.2
SDev	.01790	94.	.0636	.198	.271	12.8	8.2
%RSD	21.220	.43490	6.3173	1.1475	2.3089	.27039	.16949

#1	.09905	21561.	.93963	17.146	12.046	4709.3	4854.2
#2	.06442	21705.	1.0663	17.151	11.667	4719.6	4866.5
*3	.08965	21739.	1.0127	17.492	11.520	4734.7	4850.9

Errors	LC Pass							
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.	
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0	

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Ave	197.06	195.38	25.835	442.75	.14522	5314.6	-1.6088
Sdev	.54	3.05	.383	3.00	.17554	35.7	.5872
%RSD	.27566	1.5609	1.4830	.67739	120.87	.67233	36.500

#1	196.50	192.54	25.418	439.61	.31921	5284.6	-2.2847
#2	197.10	194.98	25.916	443.06	-.03183	5354.1	-1.2235
#3	197.58	198.60	26.171	445.58	.14829	5305.1	-1.3183

Errors	LC Pass							
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.	
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000	

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	- .01503	18.536	2.1718	2.3927	213.72	.70023	.20806
SDev	.12231	.046	.5507	.0084	.23	1.3873	.02071
%RSD	813.78	.24769	25.355	.35039	.10865	198.13	9.9543

#2	.05480	18 497	1.9555	2.3985	213.96	1.3821	.19153
#3	.05637	18.524	2.7978	2.3831	213.71	-.89609	.20136
	-.15626	18.586	1.7622	2.3964	213.50	1.6146	.23129

Errors   LC\_Pass   LC\_Pass   LC\_Pass   LC\_Pass   LC\_Pass   LC\_Pass   LC\_Pass   LC\_Pass

High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	47.955	.36870	1.8199	2.4336	.60581	-2.7346	-.81120
SDev	.199	.92597	1.4294	1.6276	.81893	.9108	.83793
ZRSD	.41444	251.14	78.545	66.879	135.18	33.308	103.30

#1	47.807	-.70014	2.2775	4.2968	.07439	-3.1063	-.70235
#2	48.181	.87870	.21769	1.2889	.19414	-1.6967	-.03301
#3	47.878	.92755	2.9645	1.7151	1.5489	-3.4007	-1.6982

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

Elem	Si2881						
Units	ug/l						
Avg	1335.6						
SDev	2.3						
ZRSD	.16968						

#1	1337.4						
#2	1336.3						
#3	1333.0						

Errors	NOCHECK						
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	88646	292531	--	--	--	--
SDev	--	535.7783	1726.513	--	--	--	--
ZRSD	--	.6043998	.5901989	--	--	--	--
#1	--	88038	290583	--	--	--	--
#2	--	88853	293136	--	--	--	--
#3	--	89048	293873	--	--	--	--

Method: MEIN1      Sample Name: 970846315

Operator:

Run Time: 08/28/97 16:20:55

Comment: MW39

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	53.199	1.4525	.18477	1.3845	-1.0141	69.393	.47890
SDev	1.958	.2749	1.6836	.1951	.7935	.047	.08563
RSD	3.6801	18.927	911.18	14.092	78.251	.06704	17.880
#1	55.318	1.2967	-.48848	1.3660	-.19876	69.398	.57777
#2	51.457	1.7700	2.1008	1.1993	-1.7839	69.437	.42827

#3	52.821	1.2909	-1.0580	1.5881	-1.0596	69.345	.43068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.02219	24294.	2.5187	16.747	7.2164	5261.3	7069.8
SDev	.08925	50.	.2163	.120	.1092	10.2	9.0
%RSD	402.21	.20558	8.5888	.71381	1.5126	.19432	.12797
#1	-.07156	24242.	2.7630	16.832	7.2072	5251.0	7060.3
#2	.10613	24298.	2.3514	16.610	7.3299	5261.3	7078.3
#3	.03200	24342.	2.4417	16.798	7.1122	5271.5	7070.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Aq3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	193.81	188.34	29.184	2170.2	-.26567	19898.	-1.3130
SDev	.29	3.56	.176	12.9	.17121	100.	1.0715
%RSD	.15048	1.8908	.60245	.59644	64.447	.50397	81.604
#1	193.60	192.45	29.137	2183.4	-.17587	19898.	-2.5160
#2	193.68	186.22	29.379	2169.8	-.15803	19999.	-.46099
#3	194.14	186.34	29.037	2157.5	-.46310	19798.	-.96212
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	-.26574	420.44	3.3548	2.6095	124.33	.81454	.25511
SDev	.24240	.51	.4343	.0107	.06	1.5585	.01011
%RSD	91.216	.12148	12.945	.40939	.04843	191.33	3.9613
#1	-.00093	419.92	3.6772	2.6141	124.37	-.96427	.24411
#2	-.31964	420.46	2.8610	2.5972	124.36	1.4679	.25726
#3	-.47664	420.94	3.5261	2.6171	124.26	1.9400	.26397
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avge	41.915	1.2556	1.4486	.58017	1.8879	-3.6899	2.1191
SDev	.153	1.0487	.5351	.59257	.6803	2.3564	1.4265
%RSD	.36486	83.518	36.936	102.14	36.036	63.860	67.317
#1	41.838	2.4035	.84785	1.1844	1.3527	-3.9114	1.2203
#2	41.815	.34785	1.6242	-.00003	2.6535	-1.2306	3.7639
#3	42.091	1.0155	1.8739	.55615	1.6575	-5.9277	1.3730

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						

Elem Si2881

Units ug/l

Avg 5830.6

SDev 8.8

ZRSD .15143

#1 5824.7

#2 5840.8

#3 5826.4

Errors NOCHECK

High

Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	89706	296097	--	--	--	--
SDev	--	229.3956	753.0885	--	--	--	--
ZRSD	--	.2557184	.2543387	--	--	--	--
	--	89453	295277	--	--	--	--
	--	89766	296255	--	--	--	--
#3	--	89900	296758	--	--	--	--

Method: MEIN1      Sample Name: 970846316

Operator:

Run Time: 08/28/97 16:29:32

Comment: MW08A

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sh2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	41.256	1.3767	-.13821	1.1759	-.38861	80.625	.52574
SDev	4.967	.7003	2.42096	1.5524	.39936	.163	.13766
ZRSD	12.040	50.867	1751.6	132.02	102.77	.20162	26.184
#1	46.929	2.1804	-2.4902	2.5658	-.31159	80.743	.68382
#2	39.151	.89770	2.3463	-.49948	-.03336	80.693	.46105
#3	37.688	1.0520	-.27070	1.4614	-.82087	80.440	.43234

Errors	LC Pass						
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.02584	64311.	1.7207	2.2257	6.4764	37.301	9919.4
SDev	.10926	207.	.1198	.3068	.2493	2.107	3.4
ZRSD	422.83	.32224	6.9640	13.786	3.8496	5.6499	.03414

#1	-.11149	64098.	1.8589	2.3502	6.6299	37.838	9915.9
#2	-.06324	64322.	1.6582	1.8762	6.6106	39.089	9922.6
#3	.09721	64512.	1.6451	2.4508	6.1888	34.978	9919.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
ELEM	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Ti1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	4.2695	5.0867	1.9740	2136.1	.17682	16247.	-.44493
SDev	.0090	5.2121	.1069	14.3	.12835	54.	.50142
%RSD	.21093	102.47	5.4159	.67103	72.586	.33079	112.69
#1	4.2785	8.6463	1.9827	2148.8	.31095	16280.	.07226
#2	4.2605	-.89589	1.8630	2120.5	.16433	16277.	-.47815
#3	4.2694	7.5095	2.0763	2139.0	.05518	16185.	-.92892
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.03700	9.6767	.28772	2.1373	294.23	.76154	.14603
SDev	.11292	.0202	.29775	.0441	.32	1.0493	.01196
%RSD	305.15	.20918	103.49	2.0621	.10802	137.79	8.1874
#1	.12783	9.6736	-.05607	2.1611	294.51	-.36086	.15596
#2	-.08942	9.6984	.46329	2.0864	294.30	.92755	.13276
#3	.07261	9.6582	.45593	2.1643	293.89	1.7179	.14936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	42.713	-.49761	2.0112	2.3491	.89106	-4.4763	2.0274
SDev	.276	.76518	1.9483	1.3669	.36844	4.4880	4.3847
%RSD	.64552	153.77	96.868	58.187	41.349	100.26	216.27
#1	42.575	.24478	3.7244	3.9224	1.3105	-6.9953	-.24117
#2	42.533	-1.2837	-.10809	1.4541	.61973	-7.1389	7.0816
#3	43.030	-.45391	2.4174	1.6707	.74294	.70530	-.75811
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
ELEM	Si2881						
Units	ug/l						
Avg	3409.0						
SDev	5.4						
%RSD	.15833						
#1	3412.2						

#2 3411.9  
#3 3402.7

Errors NOCHECK  
High  
Low

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	88526	292186	--	--	--	--
SDev	--	122.0014	290.6636	--	--	--	--
ZRSD	--	.1378136	.0994788	--	--	--	--
#1	--	88404	291921	--	--	--	--
#2	--	88648	292497	--	--	--	--
#3	--	88527	292141	--	--	--	--

Method: MEIN1      Sample Name: 970837901A  
Run Time: 08/28/97 16:38:07

Operator:

Comment:

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	1190.6	.83958	.08857	1.8051	7.7497	166.67	.71311
SDev	3.6	.10239	.41825	.1523	.7372	.13	.11182
ZRSD	.30089	12.195	472.24	8.4382	9.5124	.07505	15.681

#1	1187.0	.72356	.57111	1.6304	6.9648	166.61	.84174
#2	1194.2	.87795	-.13527	1.9098	7.8569	166.82	.65855
#3	1190.6	.91725	-.17013	1.8751	8.4275	166.59	.63903

Errors	LC Pass						
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.02911	12364.	4.1573	9.0420	8.2754	8552.6	17037.
SDev	.02709	18.	.1485	.2494	.1619	8.0	.42.
ZRSD	.93.077	.14272	3.5731	2.7584	1.9570	.09390	.24701

#1	.00556	12345.	4.2476	9.3285	8.4116	8545.1	16989.
#2	.02305	12371.	3.9858	8.9241	8.3183	8561.1	17066.
#3	.05872	12378.	4.2384	8.8734	8.0964	8551.7	17055.

Errors	LC Pass						
High	10000.	625000.	100000.	100000.	100000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	T11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	354.96	350.66	28.522	25345.	-.07292	29868.	.18910
SDev	.18	5.23	.260	138.	.14251	261.	2.3694

%RSD	.04987	1.4922	.91137	.54313	195.43	.87472	1253.0
#1	354.83	356.04	28.223	25187.	-.11441	29568.	1.3728
#2	355.16	350.36	28.699	25444.	.08573	30044.	1.7334
#3	354.90	345.59	28.642	25403.	-.19007	29992.	-2.5389
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	100000.	50000.	200000.	10000.	250000.	100000.
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	12.132	24.214	10.394	7.1824	178.95	-.95614	3.8992
SDev	.125	.011	.674	.0597	.08	2.86416	.0379
%RSD	1.0302	.04615	6.4848	.83091	.04599	299.56	.97095
#1	12.061	24.203	10.876	7.1142	178.89	2.3311	3.8983
#2	12.277	24.225	9.6238	7.2251	179.04	-2.9141	3.9374
#3	12.060	24.213	10.681	7.2079	178.91	-2.2855	3.8617
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	81.136	.86594	2.2738	1.3012	.60895	-2.4748	1.3682
SDev	.255	.88596	.6684	.9493	.35608	.8248	1.0196
%RSD	.31397	102.31	29.395	72.957	58.473	33.329	74.523
#1	80.917	1.8871	1.5020	.28766	.94101	-3.3686	2.5379
#2	81.416	.40890	2.6590	2.1696	.23294	-1.7430	.66725
#3	81.075	.30183	2.6604	1.4464	.65292	-2.3127	.89943
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
ELEM	Si2881						
Units	ug/l						
Avg	9750.4						
SDev	38.7						
%RSD	.39672						
#1	9707.2						
#2	9781.8						
#3	9762.3						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Wavlen	--	Sc	Y	--	--	--	--
		361.384	371.030	--	--	--	--

<b>Avg</b>	--	<b>87671</b>	<b>289129</b>	--	--	--	--
<b>SDev</b>	--	<b>626.6150</b>	<b>2058.781</b>	--	--	--	--
<b>Z*SD</b>	--	<b>.7147319</b>	<b>.7120640</b>	--	--	--	--
<b>#1</b>	--	<b>86987</b>	<b>286884</b>	--	--	--	--
<b>#2</b>	--	<b>87810</b>	<b>289573</b>	--	--	--	--
<b>#3</b>	--	<b>88217</b>	<b>290929</b>	--	--	--	--

**Method: MEIN1      Sample Name: 970846603A      Operator:**

**Run Time:** 08/28/97 16:46:41

### **Comment:**

**Mode: CONC**    **Corr. Factor: 1**

**Operator:**

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	10305.	5.3677	.17456	1.4031	2.2537	107.02	.90501
SDev	11.	.1540	1.4871	.2106	.9779	.18	.14261
ZRSD	.10724	2.8685	851.91	15.009	43.392	.16563	15.758

#1	10310.	5.2155	.73025	1.2898	1.3174	107.19	1.0691
#2	10312.	5.3640	1.3038	1.6460	2.1751	107.03	.83538
#3	10292.	5.5234	-1.5103	1.2733	3.2685	106.84	.81059

Errors	LC Pass							
High	600000.	100000.	100000.	100000.	10000.	70000.	10000.	
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000	

	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.06740	57073.	23.220	14.031	16.212	5914.1	8709.1
SDev	.03166	112.	.214	.329	.108	8.0	3.6
ZRSD	46.968	.19594	.92349	2.3462	.66376	.13497	.04145

#1	.05007	56965.	23.457	14.340	16.154	5904.9	8706.9
#2	.04820	57066.	23.040	13.685	16.146	5918.2	8713.3
#3	.10394	57189.	23.162	14.069	16.336	5919.2	8707.2

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	625000.	1000000.	1000000.	1000000.	500000.	800000.
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0

<b>Elem</b>	<b>Mn2576</b>	<b>Mn3441</b>	<b>Ni2316</b>	<b>K_7664</b>	<b>Ag3280</b>	<b>Na3302</b>	<b>Tl1908</b>
<b>Units</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>Avg</b>	396.13	388.74	19.638	2716.5	.48876	10674.	-.05285
<b>SDev</b>	.52	6.53	.151	20.4	.17252	31.	2.13603
<b>ZRSD</b>	.13131	1.6810	.76668	.75209	35.297	.29280	4041.4

<b>#1</b>	<b>395.67</b>	<b>394.55</b>	<b>19.719</b>	<b>2739.4</b>	<b>.67724</b>	<b>10703.</b>	<b>-1.6373</b>
<b>#2</b>	<b>396.04</b>	<b>381.67</b>	<b>19.731</b>	<b>2700.2</b>	<b>.33868</b>	<b>10678.</b>	<b>2.3764</b>
<b>#3</b>	<b>396.69</b>	<b>390.01</b>	<b>19.464</b>	<b>2709.9</b>	<b>.45034</b>	<b>10641.</b>	<b>-.89766</b>

Errors	LC Pass							
th	10000.	100000.	50000.	200000.	10000.	250000.	100000.	
LW	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000	

**Ele**m V\_2924 Zn2138 Mo2020 Li6707 Sr4215 Sn1899 Ti3349

Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	6.0731	27.863	2.9927	6.9685	221.31	17.897	44.617
SDev	.1327	.151	.4226	.0778	.15	1.660	.130
%RSD	2.1851	.54226	14.122	1.1169	.06747	9.2781	.29184
#1	6.1643	27.994	3.3716	7.0534	221.43	16.038	44.617
#2	6.1340	27.898	3.0695	6.9005	221.35	18.419	44.486
#3	5.9208	27.698	2.5369	6.9516	221.15	19.233	44.747
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	25000.	25000.	5000.0	10000.	25000.	10000.
Low	-50.000	-20.000	-50.000	-50.000	-30.000	-50.000	-50.000
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	32.346	.29059	1.9583	4.4939	5.8037	-3.7203	2.1189
SDev	.343	.98840	.6219	.3026	.1014	1.1221	2.2056
%RSD	1.0600	340.14	31.757	6.7328	1.7466	30.162	104.09
#1	32.662	1.3650	1.2522	4.2714	5.6867	-4.8584	3.5203
#2	31.982	.08666	2.4244	4.3719	5.8592	-2.6149	3.2600
#3	32.393	-.57995	2.1984	4.8384	5.8652	-3.6876	-.42348
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	25000.						
Low	-100.00						
Elem	Si2881						
Units	ug/l						
Avg	8917.3						
SDev	7.5						
%RSD	.08381						
#1	8923.1						
#2	8919.9						
#3	8908.9						
Errors	NOCHECK						
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	86593	286202	--	--	--	--
SDev	--	226.0295	737.5807	--	--	--	--
%RSD	--	.2610261	.2577137	--	--	--	--
#1	--	86336	285369	--	--	--	--
#2	--	86762	286773	--	--	--	--
#3	--	86680	286463	--	--	--	--

Method: MEIN1

Sample Name: CCV4

Operator:

Run Time: 08/28/97 16:55:15

Comment: CCV

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1022.0	989.65	993.61	.39817	1004.0	990.06	992.39
SDev	3.8	2.94	4.44	.31058	5.7	.71	1.56
ZRSD	.37541	.29702	.44664	78.002	.57147	.07201	.15767

#1	1026.2	986.45	988.54	.60787	1003.4	990.71	990.72
#2	1018.7	992.23	996.81	.54527	998.64	989.30	992.62
#3	1021.1	990.26	995.47	.04137	1010.1	990.17	993.82

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass
Value	1000.0	1000.0	1000.0		1000.0	1000.0	1000.0
Range	10.490	10.490	10.490		10.490	10.490	10.490

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	993.30	12.736	1000.5	988.66	1009.4	963.00	22.047
SDev	2.14	1.237	1.0	1.18	1.5	2.08	.660
ZRSD	.21566	9.7143	.09792	.11951	.15065	.21565	2.9918

#1	990.86	13.939	999.37	987.34	1010.7	961.55	22.092
#2	994.17	12.801	1000.7	988.99	1007.7	965.38	21.367
#3	994.87	11.467	1001.3	989.64	1009.6	962.07	22.684

Errors	OC Pass	NOCHECK	OC Pass	OC Pass	OC Pass	OC Pass	NOCHECK
Value	1000.0		1000.0	1000.0	1000.0	1000.0	
Range	10.490		10.490	10.490	10.490	10.490	

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1018.5	999.55	1002.3	-16.662	99.471	52.061	985.59
SDev	.4	4.56	1.0	16.063	.145	79.881	1.07
ZRSD	.03944	.45620	.10300	96.405	.14530	153.44	.10886

#1	1018.1	1003.4	1001.5	-.35856	99.629	132.75	985.34
#2	1018.8	1000.7	1003.4	-17.154	99.345	50.410	986.77
#3	1018.6	994.52	1001.9	-32.473	99.440	-26.982	984.67

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	OC Pass
Value	1000.0	1000.0	1000.0		100.00		1000.0
Range	10.490	10.490	10.490		10.490		10.490

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Tl3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	1005.8	992.97	.35514	1015.9	999.73	-.77157	.10010
SDev	.2	1.22	.57186	5.5	.47	1.07640	.03096
ZRSD	.02448	.12248	161.02	.54391	.04657	139.51	30.933

#1	1005.6	991.80	.03024	1022.2	1000.3	.14051	.07382
#2	1006.0	992.88	1.0154	1011.6	999.47	-1.9589	.13424
#3	1005.9	994.23	.01974	1014.0	999.46	-.49638	.09225

Errors	OC Pass	OC Pass	NOCHECK	OC Pass	OC Pass	NOCHECK	NOCHECK
Value	1000.0	1000.0		1000.0	1000.0		
Range	10.490	10.490		10.490	10.490		

Range	10.490	10.490		10.490	10.490		
Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avge	.67885	-.58701	.88987	986.79	991.07	983.67	998.57
SDev	.18356	.58616	.20693	1.32	4.18	4.96	4.69
%RSD	27.040	99.855	23.254	.13392	.42192	.50373	.46972
#1	.74077	-.37682	1.0993	985.73	986.80	979.23	993.19
#2	.82346	-.13492	.88468	986.36	995.16	989.01	1000.7
#3	.47234	-1.2493	.68559	988.27	991.25	982.76	1001.8
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value Range							
Elem Units	Si2881 ug/l						
Avge	5.0740						
SDev	2.1654						
%RSD	42.677						
#1	7.5083						
#2	4.3516						
#3	3.3621						
Errors	NOCHECK						
Value Range							
IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	90729	299922	--	--	--	--
SDev	--	211.2913	744.7443	--	--	--	--
%RSD	--	.2328817	.2483126	--	--	--	--
#1	--	90489	299072	--	--	--	--
#2	--	90811	300234	--	--	--	--
#3	--	90887	300460	--	--	--	--

Method: MEIN1      Sample Name: CCV123

Operator:

Run Time: 08/28/97 17:03:48

Comment: CCV

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	33.761	2.5040	-.66281	983.83	-4.6440	.79122	1.1039
SDev	3.012	.2474	1.89210	2.74	1.6692	.01924	.1735
%RSD	8.9226	9.8812	285.47	.27865	35.944	2.4313	15.717
#1	37.183	2.5079	-2.6651	980.80	-3.0608	.78790	1.3015
#2	32.594	2.2546	-.41873	984.56	-4.4834	.81190	1.0337
#3	31.507	2.7494	1.0954	986.14	-6.3877	.77386	.97650

Errors Value Range	NOCHECK	NOCHECK	NOCHECK	OC Pass 1000.0 10.490	NOCHECK	NOCHECK	NOCHECK
Elem Units	Cd2265 ug/l	Ca3179 ug/l	Cr2677 ug/l	Co2286 ug/l	Cu3247 ug/l	Fe2714 ug/l	Mg2790 ug/l
Avg	.15001	48507.	1.7838	.17048	.44603	27.167	45773.
SDev	.05518	140.	.2414	.16722	.31617	3.041	19.
ZRSD	36.784	.28878	13.534	98.084	70.885	11.195	.04057
#1	.10256	48345.	2.0481	.34292	.70278	24.703	45756.
#2	.21057	48596.	1.7283	.00903	.54242	30.567	45792.
#3	.13691	48579.	1.5750	.15949	.09289	26.232	45770.
Errors Value Range	NOCHECK	OC Pass 50000. 10.490	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pass 50000. 10.490
Elem Units	Mn2576 ug/l	Mn3441 ug/l	Ni2316 ug/l	K_7664 ug/l	Ag3280 ug/l	Na3302 ug/l	Tl1908 ug/l
Avg	.02215	1.7853	-1.6510	51819.	.05210	48558.	-4.5121
SDev	.01835	6.4252	.3090	89.	.05590	202.	1.4984
ZRSD	82.834	359.89	18.716	.17128	107.29	.41572	33.209
#1	.03603	7.1497	-1.3919	51921.	.10811	48772.	-3.7698
#2	.02908	3.5416	-1.5681	51781.	.05187	48533.	-3.5297
#3	.00135	-5.3354	-1.9930	51757.	-.00368	48370.	-6.2368
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	OC Pass 50000. 10.490	NOCHECK	OC Pass 50000. 10.490	NOCHECK
Elem Units	V_2924 ug/l	Zn2138 ug/l	Mo2020 ug/l	Li6707 ug/l	Sr4215 ug/l	Sn1899 ug/l	Ti3349 ug/l
Avg	.25257	.60194	1023.6	1.3662	3.2923	1029.3	1019.2
SDev	.39471	.10168	2.0	.0217	.0418	1.7	1.0
ZRSD	156.28	16.892	.19331	1.5867	1.2691	.16671	.09391
#1	.36461	.66356	1022.4	1.3421	3.3317	1027.9	1018.2
#2	.57915	.65767	1022.5	1.3840	3.2967	1031.2	1019.2
#3	-.18605	.48458	1025.9	1.3725	3.2484	1028.8	1020.1
Errors Value Range	NOCHECK	NOCHECK	OC Pass 1000.0 10.490	NOCHECK	NOCHECK	OC Pass 1000.0 10.490	OC Pass 1000.0 10.490
Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avg	983.41	983.77	983.87	6.9336	.29228	-14.494	6.2422
SDev	.64	2.57	3.32	.7497	.59660	2.638	1.5677
ZRSD	.06465	.26122	.33740	10.813	204.12	18.199	25.114
#1	982.70	981.14	980.63	6.0997	.71451	-17.471	4.7266
#2	983.62	986.28	983.70	7.5518	-.39024	-13.561	6.1426
#3	983.92	983.89	987.27	7.1492	.55256	-12.449	7.8572

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1000.0						
Range	10.490						
ELEM	Si2881						
Units	ug/l						
Avg	997.49						
SDev	2.81						
%RSD	.28128						
#1	1000.6						
#2	996.68						
#3	995.17						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	--	Sc	Y	--	--	--	--
Wtlen	--	361.384	371.030	--	--	--	--
Avg	--	87344	288038	--	--	--	--
SDev	--	202.0528	688.5218	--	--	--	--
%RSD	--	.2313308	.2390383	--	--	--	--
#1	--	87139	287353	--	--	--	--
#2	--	87349	288032	--	--	--	--
#3	--	87543	288730	--	--	--	--

Method: MEIN1      Sample Name: BLANK

Operator:

Run Time: 08/28/97 17:12:21

Comment: CCB

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	10.998	.07817	.67126	1.3775	.50211	.31053	.36058
SDev	3.039	.73379	1.5117	.9229	.83982	.01855	.15335
%RSD	27.633	938.72	225.20	67.001	167.26	5.9730	42.529
#1	14.490	.38156	-1.0626	1.2624	-.43447	.32138	.53226
#2	9.5494	.61160	1.7126	2.3526	1.1881	.28911	.31233
#3	8.9537	-.75866	1.3638	.51751	.75270	.32109	.23716
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
ELEM	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.13370	-1.6637	.26579	.29558	-.43717	1.5558	23.074
SDev	.10769	.7418	.38534	.34505	.03576	3.9247	.077
SD	80.552	44.588	144.98	116.74	8.1794	252.25	.33412
#1	.08576	-1.8166	.52049	.68717	-.40481	5.6315	23.145

#2	.05829	-2.3172	-.17752	.03612	-.47556	-2.1980	22.992
#3	.25703	-.85737	.45440	.16344	-.43113	1.2341	23.085
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
ELEM	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.15065	4.4152	.35220	11.063	-.05063	25.596	-1.5432
SDev	.02649	8.9657	.26921	31.611	.17751	109.05	1.2731
ZRSD	17.586	203.06	76.437	285.73	350.58	426.06	82.502
#1	-.14496	13.773	.48430	45.948	.13255	150.54	-2.8279
#2	-.17952	-4.0991	.52984	-15.684	-.22187	-50.432	-1.5197
#3	-.12746	3.5720	.04245	2.9263	-.06258	-23.325	-.28190
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000
ELEM	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	.07138	-.65117	1.0282	.46284	.12985	-.77355	.44501
SDev	.20081	.05475	.3625	.06845	.02275	.93774	.04126
ZRSD	281.32	8.4087	35.260	14.789	17.523	121.23	9.2709
#1	.21381	-.70373	1.3542	.54042	.15419	.08701	.47358
#2	-.15829	-.65533	1.0925	.43713	.10912	-1.7730	.46373
#3	.15863	-.59446	.63778	.41097	.12622	-.63467	.39771
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.000
ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	1.3292	-.72470	2.4269	1.0369	-.40063	.39183	.81063
SDev	.6156	.92280	.9732	1.7783	.38086	1.4121	2.8116
ZRSD	46.317	127.34	40.102	171.51	95.067	360.38	346.85
#1	1.8180	-1.2329	2.5080	2.3400	-.59637	1.6755	-2.4298
#2	.63777	.34049	3.3570	1.7596	.03830	.62063	2.2577
#3	1.5319	-1.2817	1.4156	-.98902	-.64382	-1.1207	2.6040
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.00000						
Range	100.00						
ELEM	Si2881						
Units	ug/l						
Avg	-.36419						
SDev	1.09672						
ID	301.14						
#1	.80826						
#2	-.53591						

#3 -1.3649

Errors NOCHECK  
 Value  
 Range

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	91118	302318	--	--	--	--
SDev	--	285.9534	905.3845	--	--	--	--
%RSD	--	.3138264	.2994808	--	--	--	--
#1	--	90859	301582	--	--	--	--
#2	--	91425	303329	--	--	--	--
#3	--	91071	302043	--	--	--	--

Method: MEIN1 Sample Name: ICSA

Operator:

Run Time: 08/28/97 17:20:56

Comment: ICSA

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	485330.	-1.8564	-13.571	2.0733	-5.3118	10.212	1.4531
SDev	1243.	.8624	1.824	.7870	1.9461	.024	.1544
%RSD	.25612	46.457	13.441	37.960	36.637	.23988	10.628
#1	486720.	-.99626	-11.469	2.1734	-7.1749	10.235	1.6310
#2	484950.	-1.8519	-14.745	2.8055	-3.2922	10.214	1.3742
#3	484320.	-2.7211	-14.497	1.2410	-5.4682	10.186	1.3540

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHEC
Value	500000.						
Range	20.000						

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	5.3032	448890.	.84034	3.7787	1.9409	175480.	483210
SDev	.1160	2015.	.55139	.2968	.0842	.260.	.453
%RSD	2.1869	.44897	65.615	7.8551	4.3383	.14841	.09369
#1	5.1876	446630.	1.4373	4.1028	1.9078	175190.	482690
#2	5.3024	449520.	.73372	3.7130	1.8783	175590.	483410
#3	5.4195	450510.	.35005	3.5202	2.0366	175680.	483530

Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	OC Pass	OC Pas
Value		500000.				200000.	500000.
Range		20.000				20.000	20.000

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	2.3656	-3.6319	-.83806	3.8915	-.06458	338.60	-14.653
SDev	.1221	7.1890	.26683	8.5722	.08037	66.95	.903
%RSD	5.1618	197.94	31.838	220.28	124.46	19.772	6.1636

#1	2.2266	4.5960	-1.1408	11.467	.02823	340.49	-14.657
#2	2.4553	-6.7929	-.63728	5.6211	-.11152	404.58	-13.749
#3	2.4150	-8.6988	-.73607	-5.4137	-.11044	270.72	-15.555

Errors	NOCHECK						
Value Range							

Elem Units	V_2924 ug/l	Zn2138 ug/l	Mo2020 ug/l	Li6707 ug/l	Sr4215 ug/l	Sn1899 ug/l	Ti3349 ug/l
Avg	-5.0809	27.332	2.7603	1.5487	32.070	.80288	-2.3389
SDev	.2833	.040	2.7297	.1211	.131	3.9842	.0448
ZRSD	5.5765	.14494	98.892	7.8182	.40873	496.24	1.9142

#1	-4.7662	27.376	5.5637	1.6824	32.213	5.3707	-2.3890
#2	-5.3158	27.322	.11082	1.5173	32.041	-1.9558	-2.3029
#3	-5.1608	27.299	2.6063	1.4465	31.956	-1.0063	-2.3247

Errors	NOCHECK						
Value Range				—			

Elem Units	B_2496 ug/l	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Avg	-12.772	-.36678	3.2914	22.651	-14.092	-17.128	-11.795
SDev	.342	4.28217	2.8137	2.012	.402	3.780	1.889
ZRSD	2.6750	1167.5	85.488	8.8834	2.8501	22.070	16.018

#1	-13.133	-5.1085	5.8087	24.313	-13.632	-13.771	-10.320
#2	-12.727	.79008	3.8115	23.227	-14.373	-16.391	-13.924
#3	-12.454	3.2181	.25385	20.414	-14.271	-21.223	-11.140

Errors	NOCHECK						
Value Range							

Elem Units	Si2881 ug/l
Avg	33.365
SDev	1.833
ZRSD	5.4934

#1	35.450
#2	32.638
#3	32.008

Errors	NOCHECK
Value Range	

IntStd de	1 NOTUSED	2 *Counts Sc	3 *Counts Y	4 NOTUSED --	5 NOTUSED --	6 NOTUSED --	7 NOTUSED --
Elem	--						
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	78475	257148	--	--	--	--

SDev	--	241.4477	837.6308	--	--	--	--
%RSD	--	.3076747	.3257392	--	--	--	--
#1	--	78203	256209	--	--	--	--
#2	--	78558	257415	--	--	--	--
#3	--	78664	257819	--	--	--	--

Method: MEIN1      Sample Name: ICSAB      Operator:  
Run Time: 08/28/97 17:29:37  
Comment: ICSAB  
Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	485300.	943.42	-8.8131	5.8481	-5.2594	523.93	479
SDev	1109.	5.98	1.0970	1.2838	3.1741	1.94	2
%RSD	.22851	.63357	12.448	21.952	60.352	.37082	.60

#1	486400.	939.67	-10.072	5.1232	-4.7602	525.36	477
#2	485330.	940.28	-8.3059	5.0907	-8.6535	524.70	477
#3	484180.	950.31	-8.0614	7.3303	-2.3644	521.72	482

Errors	OC Pass	OC Pass	NOCHECK	NOCHECK	NOCHECK	OC Pass	OC
Value	500000.	1000.0				500.00	500
Range	20.000	20.000				20.000	20.

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	928.49	445560.	473.70	472.47	581.05	173850.	480.
SDev	6.22	4629.	3.55	3.08	3.90	1056.	2
%RSD	67017	1.0390	.74960	.65141	.67111	.60766	.511

#1	924.26	442050.	471.78	470.67	584.10	173100.	478
#2	925.57	443810.	471.51	470.71	582.40	173390.	479
#3	935.63	450800	477.79	476.02	576.66	175060	482

Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	491.00	477.87	912.43	44.408	1090.6	354.29	-14
SDev	2.84	16.44	6.16	34.553	.3	112.62	
%PSD	57719	3.4406	67462	77.808	02573	31.787	3.9

#1	488.72	474.77	908.18	21.004	1090.3	353.59	-14
#2	490.09	463.20	909.61	28.127	1090.8	242.03	-13
#3	484.17	485.64	818.49	84.084	1080.8	467.26	-14

Errors	OC Pass	OC Pass	OC Pass	NOCHECK	OC Pass	NOCHECK	NOC
Value	500.00	500.00	1000.0		1000.0		
Range	30_000	30_000	30_000		30_000		

Avg	487.78	1046.4	3.3975	1.2506	32.103	5.4447	-2.3138
SDev	2.59	4.6	2.1179	.0805	.134	5.7649	.0749
ZRSD	.53024	.44107	62.338	6.4364	.41686	105.88	3.2375

#1	486.18	1043.1	5.7014	1.2750	32.231	11.641	-2.2484
#2	486.40	1044.4	1.5352	1.1607	32.114	.23954	-2.2975
#3	490.77	1051.6	2.9558	1.3161	31.964	4.4538	-2.3955

Errors	OC Pass	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00	1000.0					
Range	20.000	20.000					

ELEM	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avg	-12.927	.35942	8.5881	948.13	941.07	-19.739	-3.3586
SDev	.583	2.8307	2.4188	9.45	4.42	2.764	2.0153
ZRSD	4.5133	787.58	28.164	.99632	.46975	14.002	60.005

#1	-13.397	-2.4469	8.9024	944.03	937.49	-19.768	-5.2312
#2	-13.111	3.2139	6.0276	941.42	939.71	-22.488	-1.2258
#3	-12.274	.31133	10.834	958.93	946.01	-16.960	-3.6187

Errors	NOCHECK						
Value							
Range							

ELEM	Si2881						
Units	ug/l						
e	35.945						
SDev	2.307						
ZRSD	6.4171						

#1	38.319						
#2	35.803						
#3	33.712						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
ELEM	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avg	--	77712	255048	--	--	--	--
SDev	--	578.5059	1643.270	--	--	--	--
ZRSD	--	.7444228	.6442984	--	--	--	--
#1	--	77239	253696	--	--	--	--
#2	--	77540	254571	--	--	--	--
#3	--	78357	256877	--	--	--	--

Comment: CRI

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	468.25	6.1912	8.2479	123.17	20.741	388.74	10.2
SDev	2.43	.1944	.4957	.61	.661	.28	.1
%RSD	.51826	3.1398	6.0100	.49323	3.1875	.07128	1.04
#1	469.69	6.4157	07.7789	122.60	20.049	388.53	10.3
#2	469.61	6.0791	8.7666	123.11	21.366	389.05	10.1
#3	465.44	6.0790	8.1982	123.81	20.809	388.64	10.1
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC F
Value	400.00	6.0000	10.000	120.00	20.000	400.00	10.0
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.0
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mn27
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	9.7827	10070.	19.826	96.479	49.123	202.41	9632
SDev	.0940	9.	.012	.284	.287	5.77	.2
%RSD	.96042	.08510	.06139	.29425	.58436	2.8519	.026
#1	9.7361	10065.	19.826	96.340	48.906	203.43	9630
#2	9.7210	10064.	19.838	96.291	49.449	207.61	9635
#3	9.8908	10079.	19.813	96.806	49.015	196.20	9631
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC F
Value	10.000	10000.	20.000	100.00	50.000	200.00	1000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl19
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	29.200	30.122	78.816	10263.	19.931	9702.9	19.4
SDev	.046	3.437	.436	16.	.197	24.2	1.5
%RSD	.15866	11.410	.55282	.15673	.98809	.24988	7.75
#1	29.176	33.566	79.180	10269.	19.873	9702.7	18.3
#2	29.254	26.692	78.933	10244.	20.151	9678.7	18.8
#3	29.171	30.107	78.333	10275.	19.770	9727.2	21.1
Errors	OC Pass	OC F					
Value	30.000	30.000	80.000	10000.	20.000	10000.	20.0
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.0
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti33
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	98.074	38.949	102.13	78.891	59.953	202.12	100.
SDev	.113	.053	.69	.147	.020	2.12	.1
%RSD	.11555	.13624	.67623	.18630	.03306	1.0472	.132
#1	97.996	38.919	101.92	78.986	59.940	199.85	100.
#2	98.023	38.919	101.57	78.721	59.976	202.47	100.
#3	98.204	39.011	102.90	78.964	59.943	204.03	100.
Errors	OC Pass	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHE
Value	100.00	40.000					
Range	20.000	20.000					

<b>Elem</b>	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
<b>Units</b>	ug/l						
<b>Avg</b>	206.70	122.83	123.34	5.5080	6.5322	6.0569	9.3416
<b>SDev</b>	.85	1.68	.18	.8832	.3149	1.4221	.2187
<b>ZRSD</b>	.41252	1.3657	.14612	16.035	4.8207	23.479	2.3406

<b>#1</b>	205.96	121.07	123.36	6.2233	6.5116	4.4940	9.4188
<b>#2</b>	207.64	123.03	123.15	4.5208	6.8569	7.2748	9.5112
<b>#3</b>	206.51	124.40	123.51	5.7800	6.2281	6.4019	9.0949

<b>Errors</b>	NOCHECK						
<b>Value</b>							
<b>Range</b>							

<b>Elem</b>	Si2881						
<b>Units</b>	ug/l						
<b>Avg</b>	212.58						
<b>SDev</b>	.06						
<b>ZRSD</b>	.03051						

<b>#1</b>	212.63						
<b>#2</b>	212.51						
<b>#3</b>	212.59						

<b>Errors</b>	NOCHECK						
<b>Value</b>							
<b>Range</b>							

<b>IntStd</b>	1	2	3	4	5	6	7
<b>Mode</b>	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED

<b>Elem</b>	--	Sc	Y	--	--	--	--
-------------	----	----	---	----	----	----	----

<b>Wavlen</b>	--	361.384	371.030	--	--	--	--
---------------	----	---------	---------	----	----	----	----

<b>Avg</b>	--	89640	296515	--	--	--	--
------------	----	-------	--------	----	----	----	----

<b>SDev</b>	--	273.0073	848.8123	--	--	--	--
-------------	----	----------	----------	----	----	----	----

<b>ZRSD</b>	--	.3045597	.2862632	--	--	--	--
-------------	----	----------	----------	----	----	----	----

<b>#1</b>	--	89341	295595	--	--	--	--
-----------	----	-------	--------	----	----	----	----

<b>#2</b>	--	89703	296681	--	--	--	--
-----------	----	-------	--------	----	----	----	----

<b>#3</b>	--	89876	297268	--	--	--	--
-----------	----	-------	--------	----	----	----	----

Method: MEIN1      Sample Name: CCV4

Operator:

Run Time: 08/28/97 17:49:40

Comment: CCV

Mode: CONC    Corr. Factor: 1

<b>Elem</b>	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
<b>Units</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>Avg</b>	1015.6	988.53	993.94	.81914	1003.5	988.55	989.16
<b>SDev</b>	3.1	1.96	2.16	.81788	1.6	.57	1.34
<b>ZRSD</b>	.30775	.19855	.21682	99.846	.15903	.05757	.13553

<b>#1</b>	1014.5	986.48	996.40	.17376	1001.7	988.84	988.03
<b>#2</b>	1019.1	988.73	992.37	1.7389	1004.4	988.93	988.81
<b>#3</b>	1013.2	990.39	993.05	.54472	1004.5	987.90	990.64



**Value  
Range**

em Si2881  
 Units ug/l  
 Avge 1.2763  
 SDev .1168  
 %RSD 9.1550

#1 1.2100  
 #2 1.4112  
 #3 1.2076

**Errors NOCHECK**  
**Value**  
**Range**

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	90660	300173	--	--	--	--
SDev	--	195.4004	623.7823	--	--	--	--
%RSD	--	.2155303	.2078074	--	--	--	--
#1	--	90435	299454	--	--	--	--
#2	--	90763	300501	--	--	--	--
#3	--	90783	300565	--	--	--	--

Method: MEIN1      Sample Name: CCV123

Operator:

Run Time: 08/28/97 17:58:13

Comment: CCV

Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	30.055	2.2236	-1.0785	982.42	-3.4645	.75872	1.1170
SDev	4.133	.2203	.9081	1.76	1.9302	.02614	.2600
%RSD	13.752	9.9053	84.198	.17902	55.714	3.4449	23.279
#1	34.778	2.4242	-2.0467	980.52	-1.7264	.78884	1.4157
#2	28.284	1.9879	-.94316	984.00	-3.1252	.74520	.99330
#3	27.103	2.2588	-.24572	982.74	-5.5418	.74210	.94185

Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK
Value				1000.0			
Range				10.490			

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.09656	48838.	1.8554	.31068	.00245	21.355	45776.
SDev	.00652	147.	.7030	.70517	.11722	6.364	19.
SD	6.7563	.30156	37.888	226.97	4781.4	29.800	.04206
#1	.09419	48697.	2.6231	1.1248	.11176	18.871	45768.
#2	.10394	48827.	1.6999	-.06398	-.12134	16.607	45763.

#3	.09156	48991.	1.2431	-.10878	.01693	28.585	45798.
Errors	NOCHECK	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	OC Pas
Value		50000.					50000.
Range		10.490					10.490
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Ti1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	-.04730	4.9083	-2.0008	51829.	.41257	48624.	-6.3546
SDev	.02020	12.709	.1375	164.	.67140	235.	.7308
%RSD	42.708	258.93	6.8725	.31630	162.73	.48282	11.500
#1	-.07059	19.561	-2.1332	51973.	1.1872	48848.	-5.9474
#2	-.03678	-3.1199	-2.0107	51863.	.05288	48644.	-7.1982
#3	-.03453	-1.7164	-1.8587	51651.	-.00234	48380.	-5.9181
Errors	NOCHECK	NOCHECK	NOCHECK	OC Pass	NOCHECK	OC Pass	NOCHECK
Value				50000.		50000.	
Range				10.490		10.490	
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	.52955	.57518	1022.3	1.0136	3.2789	1023.9	1018.9
SDev	.57494	.04107	3.4	.0301	.0477	2.4	.5
%RSD	108.57	7.1401	.33477	2.9741	1.4560	.23417	.04996
#1	1.1934	.62260	1018.6	1.0422	3.3338	1022.6	1018.3
#2	.19707	.55183	1023.2	.98213	3.2557	1022.4	1019.1
#3	.19815	.55112	1025.2	1.0163	3.2471	1026.7	1019.2
Errors	NOCHECK	NOCHECK	OC Pass	NOCHECK	NOCHECK	OC Pass	OC Pass
Value			1000.0			1000.0	
Range			10.490			10.490	
Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960/2
Units	ug/l						
Avge	982.78	978.56	984.35	7.5398	-.43064	-15.074	5.9083
SDev	.79	9.23	2.67	2.5384	.95172	2.623	1.9250
%RSD	.08034	.94329	.27132	33.667	221.00	17.403	32.581
#1	983.69	968.03	986.76	10.234	-1.4752	-13.804	3.8229
#2	982.26	982.37	984.81	5.1935	.38732	-18.090	7.6173
#3	982.38	985.27	981.48	7.1915	-.20403	-13.327	6.2848
Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1000.0						
Range	10.490						
Elem	Si2881						
Units	ug/l						
Avge	991.08						
SDev	2.34						
%RSD	.23579						
#1	993.76						
#2	990.04						
#3	989.45						

## Errors NOCHECK

Value  
ge

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avgae	--	87045	287060	--	--	--	--
SDev	--	264.6639	808.9464	--	--	--	--
ZRSD	--	.3040541	.2818043	--	--	--	--
#1	--	86742	286138	--	--	--	--
#2	--	87231	287652	--	--	--	--
#3	--	87162	287389	--	--	--	--

Method: MEIN1

Sample Name: BLANK

Operator:

Run Time: 08/28/97 18:06:45

Comment: CCB

Mode: CONC Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	10.018	.02473	-.01371	.69237	.56942	.25668	.35930
SDev	.926	.29932	.87126	1.0502	1.3219	.01554	.11935
ZRSD	9.2402	1210.6	6356.2	151.68	232.16	6.0530	33.217
#1	10.927	.02708	.91697	-.36184	-.93176	.25586	.49710
#2	9.0768	.32286	-.14817	1.7385	1.5595	.27261	.29107
#3	10.051	-.27577	-.80992	.70043	1.0805	.24157	.28972
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avgae	.06640	-.44329	.06264	.00238	-.50142	-.52644	.22.809
SDev	.06351	.95356	.25149	.15238	.09880	5.08017	.138
ZRSD	95.642	215.11	401.47	6394.4	19.703	965.01	.60502
#1	.00400	-.86524	.35178	.17827	-.46919	-3.5920	.22.650
#2	.13096	-1.1131	-.10524	-.08151	-.42276	5.3376	.22.897
#3	.06425	.64845	-.05862	-.08961	-.61230	-3.3249	.22.880
Errors	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass	OC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl11908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
ge	-.20391	-1.0738	.02883	-.5.8119	-.07084	-18.360	-.83725
sdev	.01160	5.1614	.25816	19.0315	.15695	29.486	.77229
ZRSD	5.6871	480.67	895.47	327.46	221.57	160.60	92.241

#1	-.20595	4.7282	-.23654	16.164	-.15244	14.542	-1.6
#2	-.19143	-2.7947	.27912	-16.778	.11011	-42.394	-.15
#3	-.21436	-5.1549	.04391	-16.822	-.17018	-27.227	-.68

Errors	OC Pass	OC P					
Value	.00000	.00000	.00000	.00000	.00000	.00000	.000
Range	15.000	15.000	40.000	5000.0	10.000	5000.0	10.0

Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti33
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avge	-.21013	-.64124	.79827	.18189	.09933	-.68551	.341
SDev	.15559	.03566	.30135	.05179	.01223	1.00613	.065
%RSD	74.046	5.5615	37.750	28.475	12.316	146.77	19.2

#1	-.20875	-.60008	.91178	.24064	.11246	-1.4592	.404
#2	-.05523	-.66284	.45665	.16220	.08825	.45190	.347
#3	-.36641	-.66080	1.0264	.14283	.09730	-1.0492	.273

Errors	OC Pass	OC P					
Value	.00000	.00000	.00000	.00000	.00000	.00000	.000
Range	50.000	20.000	50.000	30.000	30.000	100.00	50.0

Elem	B_2496	2068/1	2068/2	2203/1	2203/2	1960/1	1960
Units	ug/l						
Avge	1.1502	-.24780	1.1616	-.80219	.43740	-1.8069	.881
SDev	.3987	1.36533	.9193	.31093	.42579	3.2947	1.06
%RSD	34.664	550.99	79.142	38.760	97.346	182.34	120.

#1	1.4756	-1.7515	.33180	-.46092	.27055	-.04949	1.39
#2	1.2695	.91436	2.1499	-.87622	.92135	.23649	-.34
#3	.70543	.09372	1.0032	-1.0694	.12030	-5.6077	1.58

Errors	OC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCH
Value	.00000						
Range	100.00						

Elem	Si2881						
Units	ug/l						
Avge	-2.0737						
SDev	.8712						
%RSD	42.014						

#1	-1.3139						
#2	-1.8825						
#3	-3.0246						

Errors	NOCHECK						
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	NOTUSED	*Counts	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Sc	Y	--	--	--	--
Wavlen	--	361.384	371.030	--	--	--	--
Avge	--	91884	304983	--	--	--	--
SDev	--	226.6282	728.6249	--	--	--	--

ZRSD	--	.2466469	.2389070	--	--	--	--
#1	--	91623	304147	--	--	--	--
#2	--	91994	305316	--	--	--	--
#3	--	92034	305485	--	--	--	--

---

Method: HEIN1      Sample Name: PBS 08269703P      Operator:  
 Run Time: 08/28/97 18:16:05  
 Comment: PBS 08269703P  
 Mode: CONC    Corr. Factor: 1

Elem	A13082	Pb2203	Se1960	Sb2068	As1890	Ba4934	Be3130
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	25.351	.80417	.39846	.28277	.44673	.23853	.32232
SDev	3.256	.36758	.19791	.89894	.25596	.01900	.11702
ZRSD	12.845	45.710	49.669	317.91	57.295	7.9668	36.305
#1	26.039	.72962	.51519	.02718	.56578	.25214	.42109
#2	28.298	1.2033	.16995	1.2818	.15294	.21682	.35278
#3	21.806	.47957	.51023	-.46070	.62149	.24664	.19308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.00	3.0000	5.0000	60.000	10.000	200.00	5.0000
Low	-200.00	-3.0000	-5.0000	-60.000	-10.000	-200.00	-5.0000
Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg2790
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.07603	-5.5732	.17290	.15158	.26086	.68465	11.258
SDev	.12010	3.8562	.19524	.27123	.49489	.31329	2.865
ZRSD	157.97	69.191	112.92	178.93	189.71	45.760	25.447
#1	-.15052	-4.3609	.38646	.44586	.65280	.37731	13.407
#2	-.14008	-9.8899	.12869	.08838	-.29525	.67305	8.0056
#3	.06252	-2.4689	.00356	.09727	.42503	1.0036	12.361
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	5000.0	10.000	50.000	25.000	100.00	5000.0
Low	-5.0000	-5000.0	-10.000	-50.000	-25.000	-100.00	-5000.0
Elem	Mn2576	Mn3441	Ni2316	K_7664	Ag3280	Na3302	Tl1908
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.06533	1.2672	.29822	24.530	-.09612	-46.845	1.6011
SDev	.03164	3.6107	.44031	14.517	.29171	21.221	1.5821
ZRSD	48.429	284.94	147.65	59.180	303.49	45.301	98.818
#1	-.09056	4.8493	.59231	38.080	.22478	-46.942	.82155
#2	-.07559	1.3235	-.20800	26.302	-.16788	-25.576	.55995
#3	-.02983	-2.3713	.51035	9.2088	-.34525	-68.018	3.4217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	15.000	15.000	40.000	5000.0	10.000	5000.0	10.000
Low	-15.000	-15.000	-40.000	-5000.0	-10.000	-5000.0	-10.000
Elem	V_2924	Zn2138	Mo2020	Li6707	Sr4215	Sn1899	Ti3349
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Avg	-.04981	2.3043	.01501	.04646	.06805	5.8523	.19392

## Lachat Runlog

Instrument #1

Analyst:

Preparation Log:

Filename:

ST128897082701

Sample ID.	Sample Amount (g, ml)	Leachate/Dig Volume		Dilution		DF	Analysis mg/l, ug/l	Result mg/l, mg/kg	Comments
		g/ml	Final Volume	V <sub>i</sub>	V <sub>f</sub>				
S 400									513181
200									13182
100									13183
50									13184
20									13185
10									13186
0									NR
ICU 1288									
1CB									
CCU									
CCB									
PBW									
100									
400									
9708320-1									
2									
3									
4									
5									
6									

Secondary Review By: J. Mack Date: 9/3/97

Analyst:  
Preparation Log:  
Filename:

SS

1200

0708276

Runlog

Instrument #1

Sample ID.	Sample Amount (g/ml)	Leachate/Dig Volume		Dilution		DP	Analysis mg/l, ug/l	Result mg/l, mg/kg	Comments
		g/ml	Final Volume	VI	VI				
9708320-08									NA
CCU									
CCB									
9708327-14									
9708320-01									CHLOR
10									
2									
3									
4									
5									
6									
8									
9708327-14									
CCU									
CCB									
9708405-1									
9708396-2									
9708367-1									
15									
10									

Secondary Review By: J. Mede Date: 9/3/97

227

Analyst: SS  
Preparation Log: 1288  
Filename: 0708 2701

## Lachat Runlog

## **Instrument-#1**

Secondary Review By: J. Marshall Date: 9/3/57

Analysis Date: 8-27-97

~~Chemistry:~~ CN

228 Page \_\_\_\_\_ of 300

# **Standards Preparation and Receiving Log**

## **Inorganics Laboratory**

Date	Analyst	Time	Standard #	Standard Name	Vendor	Preparation Method	Expiration Date
27-97	SJ	0900	13176	1000 mg/L KCN CN STOCK	NA	1.00g KCN FISHER LOT 871600 + 1.25g KCN BAKER LOT J13702 → 500ml	8-27-98
8-27-97	SJ	1205	13177	180 mg/l KCN CONC. ICV	NA	1 ml S13149 → 100 ml	9-27-97
8-27-97	alhm	1400	13178	ATLICV/ 500 mg/ml	Hach	2 ml 25,000 mg/l S10561 → 100 ml	8-28-97
8-27-97	SJ	1400	13179	50 mg/L KCN	NA	4.95 ml S13176 → 100 ml	9-27-97
			13180	5 mg/L KCN		10 ml S13179 → 100 ml	
			13181	400 ppb KCN		20 ml S13180 + → 200 ml	
			13182	200		10 ml	
			13183	100		5 ml	
			13184	50		2.5 ml	
			13185	20		1.0 ml	
			13186	10 ↓	-	0.5 ml ↓	
8-28-97	alhm	1130	13187	0.01H ICV B3 0.16 mg/ml	n/a	8.0 ml S13141 → 500ml	8-28-97
↓	↓	↓	13188	0.01H LC63, 0.020 mg/ml	↓	1.0 ml S13143 → 500ml	↓
R-27-97	JCG	1730	13189	0.01H ICV C1 0.020 mg/ml	- n/a	100 ml S13142 → 500ml	8-28-97
			13190	c2		S13159	
			13191	↓ c3		↓ S13187 ↓	
			13192	0.01H LC63 1.00 mg/ml		10.0 ml S13143 → 100ml	
			13193	0.015 mg/ml		2.5 ml S13192 → 500ml	
			13194	0.010		5.0	
			13195	0.000		10.0	
✓	✓	↓	13196	0.050 ↓	✓	25.0 ↓	✓
						JEM 9/3/97	

Secondary Review By: J. Meff Date: 9/3/97

70

Page \_\_\_\_\_ of 150

## QuikChem AE Calibration Report for Calibration 97082701

Method: CLP CYANIDE

This calibration was first done or last modified on 08/27/97 at 03:55 pm

This report prepared on 08/27/97 at 04:31 pm

Analyte	Units	---- Average Concentrations ---			Baseline Corrected Average Absorbance
		Known	Determined	% Residual	
Standard A, CLP CYANIDE	ug/L	400.000	393.785	1.55	0.1041
Standard B, CLP CYANIDE	ug/L	200.000	209.403	-4.70	0.0560
Standard C, CLP CYANIDE	ug/L	100.000	105.693	-5.69	0.0289
Standard D, CLP CYANIDE	ug/L	50.000	52.223	-4.45	0.0150
Standard E, CLP CYANIDE	ug/L	20.000	18.176	9.12	0.0061
Standard F, CLP CYANIDE	ug/L	10.000	6.153	38.47	0.0030
Standard G, CLP CYANIDE	ug/L	0.000	-5.433	***.**	-0.0001

This calibration may have been modified since it was first run!  
 If there are any questions about this, see the calibration graph displayed  
 in "Calib Graphs and Stats" menu selection, Results/Approval.

----- End of Calibration Report -----

## Calibration Statistics Report

Cal Ref: 97082701

08/27/97 04:32 pm

Method: CLPCN

Channel: CLP CYANIDE

## Correlation Coefficients

Reg Stds	Full	Chord 1	Chord 2	Chord 3	Chord 4	Chord 5
1 A-G	0.9983	0.9985	0.9978	0.9977	0.9988	0.9996

## Percent Standard Deviation in Slope

1 A-G	1.8	1.8	2.1	2.1	1.5	0.9
-------	-----	-----	-----	-----	-----	-----

=====  
uikChem AE Runtime Report for Tray 97082701.RS  
ethod: CLP CYANIDE

is report and tray were started on 08/27/97 at 03:56 pm.  
operator: Tray Template: Default

Comments:

- Calibration now in effect is Ref: 97082701 ,08/27/97 03:55 pm

- Page 1 of report for tray 97082701.RS -----

up 101, Sample: ICV 1288		TIME: 04:00
Ch. 1: CLP CYANIDE	; 106.754 ug/L	PIF=0.98 Abs= 0.0292
up 102, Sample: ICB		TIME: 04:01
Ch. 1: CLP CYANIDE	; -4.340 ug/L	PIF=0.00 Abs= 0.0002
up 103, Sample: CCV		TIME: 04:01
Ch. 1: CLP CYANIDE	; 220.333 ug/L	PIF=0.99 Abs= 0.0589
up 104, Sample: CCB		TIME: 04:02
Ch. 1: CLP CYANIDE	; -5.405 ug/L	PIF=0.00 Abs=-0.0001
up 105, Sample: PBW		TIME: 04:03
Ch. .: CLP CYANIDE	; -5.393 ug/L	PIF=0.00 Abs=-0.0000
up 106, Sample: 100		TIME: 04:04
Ch. 1: CLP CYANIDE	; 106.540 ug/L	PIF=0.97 Abs= 0.0292
up 107, Sample: 400		TIME: 04:04
Ch. 1: CLP CYANIDE	; 410.077 ug/L	PIF=0.98 Abs= 0.1084
up 108, Sample: 9708320-01		TIME: 04:05
Ch. 1: CLP CYANIDE	; 136.128 ug/L	PIF=0.98 Abs= 0.0369
up 109, Sample: 9708320-02		TIME: 04:06
Ch. 1: CLP CYANIDE	; 19.301 ug/L	PIF=0.98 Abs= 0.0064
up 110, Sample: 9708320-03		TIME: 04:07
Ch. 1: CLP CYANIDE	; 58.285 ug/L	PIF=0.98 Abs= 0.0166
up 111, Sample: 9708320-04		TIME: 04:07
Ch. 1: CLP CYANIDE	; 1.645 ug/L	PIF=0.92 Abs= 0.0018

- Report for tray 97082701.RS continued on next page . . .

- Calibration now in effect is Ref: 97082701 ,08/27/97 03:55 pm  
- Page 2 of report for tray 97082701.RS -----

up 12, Sample: 9708320-05		TIME: 04:09
Ch. 1: CLP CYANIDE	; 64.427 ug/L	PIF=0.98 Abs= 0.0182
up 113, Sample: 9708320-06		TIME: 04:09
Ch. 1: CLP CYANIDE	; -3.829 ug/L	PIF=0.39 Abs= 0.0004
up 114, Sample: 9708320-08		TIME: 04:10
Ch. 1: CLP CYANIDE	; -3.348 ug/L	PIF=0.44 Abs= 0.0005
up 115, Sample: CCV		TIME: 04:11
Ch. 1: CLP CYANIDE	; 218.811 ug/L	PIF=0.99 Abs= 0.0585
up 116, Sample: CCB		TIME: 04:12
Ch. 1: CLP CYANIDE	; -5.523 ug/L	PIF=0.00 Abs=-0.0001
up 117, Sample: 9708327-14		TIME: 04:12
Ch. 1: CLP CYANIDE	; -3.072 ug/L	PIF=0.42 Abs= 0.0006
up 118, Sample: 9708320-01 CHLOR		TIME: 04:13
Ch. 1: CLP CYANIDE	; 887.814 ug/L	PIF=0.98 Abs= 0.2331
*** Above concentration is significantly > high standard's concentration.		
up 119, Sample: 9708320-01D CHLOR		TIME: 04:14
Ch. 1: CLP CYANIDE	; 883.959 ug/L	PIF=0.98 Abs= 0.2320
*** Above concentration is significantly > high standard's concentration.		
up 120, Sample: 9708320-02 CHLOR		TIME: 04:15
Ch. 1: CLP CYANIDE	; 19.161 ug/L	PIF=0.99 Abs= 0.0064
up 121, Sample: 9708320-03 CHLOR		TIME: 04:16
Ch. 1: CLP CYANIDE	; 59.690 ug/L	PIF=0.98 Abs= 0.0169
up 122, Sample: 9708320-04 CHLOR		TIME: 04:16
Ch. 1: CLP CYANIDE	; 26.476 ug/L	PIF=0.99 Abs= 0.0083
up 123, Sample: 9708320-05 CHLOR		TIME: 04:17
Ch. 1: CLP CYANIDE	; 71.398 ug/L	PIF=0.97 Abs= 0.0200
up 124, Sample: 9708320-06 CHLOR		TIME: 04:18
Ch. 1: CLP CYANIDE	; -1.760 ug/L	PIF=0.79 Abs= 0.0009
up 125, Sample: 9708320-08 CHLOR		TIME: 04:19
Ch. 1: CLP CYANIDE	; 28.297 ug/L	PIF=0.99 Abs= 0.0087

- Report for tray 97082701.RS continued on next page . . .

- Calibration now in effect is Ref: 97082701 ,08/27/97 03:55 pm

- Page 3 of report for tray 97082701.RS -----

jp 126, Sample: 9708327-14 CHLOR		TIME: 04:20
Ch. 1: CLP CYANIDE	; 0.393 ug/L	PIF=0.86 Abs= 0.0015
jp 127, Sample: CCV		TIME: 04:20
Ch. 1: CLP CYANIDE	; 221.830 ug/L	PIF=0.98 Abs= 0.0593
jp 128, Sample: CCB		TIME: 04:21
Ch. 1: CLP CYANIDE	; -5.438 ug/L	PIF=0.00 Abs=-0.0001
jp 129, Sample: 9708405-01		TIME: 04:22
Ch. 1: CLP CYANIDE	; 6.958 ug/L	PIF=0.98 Abs= 0.0032
jp 130, Sample: 9708396-02		TIME: 04:23
Ch. 1: CLP CYANIDE	; -5.555 ug/L	PIF=0.00 Abs=-0.0001
jp 131, Sample: 9708367-01 ECCITIWF S <sup>E</sup> 8-27-97		TIME: 04:23
Ch. 1: CLP CYANIDE	; -4.719 ug/L	PIF=0.00 Abs= 0.0001
jp 132, Sample: 9708367-01S ECCITIWS S <sup>E</sup> 8-27-97		TIME: 04:24
Ch. 1: CLP CYANIDE	; 107.085 ug/L	PIF=0.98 Abs= 0.0293
jp 133, Sample: 9708367-01D ECCITIWF S <sup>E</sup> 8-27-97		TIME: 04:25
Ch. 1: CLP CYANIDE	; -5.562 ug/L	PIF=0.00 Abs=-0.0001
jp 134, Sample: 9708367-02 ECCITIWF S <sup>E</sup> 8-27-97		TIME: 04:26
Ch. 1: CLP CYANIDE	; -4.699 ug/L	PIF=0.00 Abs= 0.0001
jp 135, Sample: PBW CHLOR		TIME: 04:27
Ch. 1: CLP CYANIDE	; -5.250 ug/L	PIF=0.00 Abs=-0.0000
jp 136, Sample: CCV		TIME: 04:27
Ch. 1: CLP CYANIDE	; 218.845 ug/L	PIF=0.99 Abs= 0.0585
jp 137, Sample: CCB		TIME: 04:28
Ch. 1: CLP CYANIDE	; -5.405 ug/L	PIF=0.00 Abs=-0.0001

----- End of Report for Tray 97082701.RS -----

## Metabolic Digestion Log

Batch #	08059703	Digestion Date	8-25-97	Matrix Spike #1 Lot #	35201	LCS Lot #	—
Method	ICP/MS	HNO3 Lot #	R 504	MS #1 Spike Volume	1ml	Ind #1	35201
Dig. Analyst	BJS	HCL Lot #	L 505	Matrix Spike #2 Lot #	34166	Ind #2	34166
Applicable SOP	MES 007048, NC	H2O2 Lot #	—	MS #2 Spike Volume	1ml		
Matrix	H2O		—	Witness/Date	QXW 8/25/97		—

Secondary Review By: J. Mead Date: 9/3/97

Page 40 of  
AEN Logbook / MEI

AUN-NC Forum MEL00704-NC

R 12483

# Metals Digestion Log

AEN#	EPA Sample #	pH	Microwave Digestion			Nanoplate Digestion			Filter Data			Texture/Artifacts/Comments
			Vessel Wt (g)	Vessel + Sample Wt (g)	Wt After Digestion (g)	Sample Vol/Wt (ml/g)	Final Volume (ml)	Color	Clarity	Before	After	
PBW 6/30 9708374-013	PBW CCSW MW-13	NA				100ml	100ml	NA	NA	NA	NA	NA
-C10			10					Brown	↓	↓	↓	↓
-C11								colorless	↓	↓	↓	↓
-C12								cloudy	↓	↓	↓	↓
-C13								clear	↓	↓	↓	↓
-C14												
-C15												
9708437-15	MZ-1 D12P MW-03											
9708440-135	MW-02											
-190	MW-195		10									
-13												
9708443-15	MU-39											
-16	MU08K											
9708446-033	BS											
-03		10										
-C3												
970844K/U-13F	MW-14											
97083117-043	ECCLITIWMS											
-6105	FD											
-C18												
-02F	WD											
-C4P	SN											

Batch #	8267704	Digestion Date	9-16-91	Matrix Spike #1 Lot #	35132	1CY1m8	NA
Method	CLP HLL	HNO3 1ml/l	100	MN #1 Matrix Volume	1mL	1mL	33493
Dig. Analyst	ULL	HCl, 1ml/l	517	Matrix Spike #1 Lot #	343588	1mL	34600
Applicable SOP	MES 0100L.WL	H2O2 1ml/l	N/A	MN #2 Spike Volume	1mL	1mL	39131
Matrix	flas	R12494	J.	Witness/Date	R. Howard 18-26-91	N/A	N/A

Secondary Review By: J. Meek Date: 9/3/91

add c 16F

**Total Cyanide Preparation Log  
Waters and Soils**

Batch Number	1288	Standards Prep Date	8-13-97	Analyst	SJ
Method	Non-CLP/CLP	Matrix	Water/Soil		—
Stock Std.-Lot#	9783	ICV-Lot#	13010	LCSS-Lot#	NA
Date of Standardization	8-13-97	ICV-Vendor	SP	LCSS-Vendor	—
Concentration (mg/l)	994	Concentration (mg/l)	5	Concentration (mg/kg)	↓

Stock Intermediate Preparation

- Stock Standard = 994 mg/l, 5.03 ml diluted to 100 ml (=50 mg/l)

Working Standard Preparation

- Stock Intermediate (50 mg/l), 10.00 ml diluted to 100 ml (=5.0 mg/l)

Matrix Spike Preparation

- Working Standard (5.0 mg/l), 1.0 ml spiked into 50 g or ml of sample and diluted to 50 ml.  
- Final Matrix Spike Concentration = 0.1 mg/l or mg/kg.

ICV Intermediate Preparation - ICV Stock Standard = (100 mg/l), 1.0 ml diluted to 200 ml (5.0 mg/l)

ICV Working Standard Preparation - Intermediate (5.0 mg/l), 1.0 ml diluted to 50 ml (=0.100 mg/l) Distill!

Sample ID#	Distillation Date	Sample Amount	Sample pH	Check for Sulfide	Final Volume	Comments
ICV	8-27-97	1.00ml	≥12	Neg	50 ml	✓ 1
PBW		50ml		—	50 ml	2
100		1.00 ml		—	50 ml	✓ 3
400		4.00 ml		—	50 ml	✓ 4
9708320-1		50 ml		—	50 ml	5
1		—		—	50 ml	6
2		—		—	50 ml	7
3		—		—	50 ml	8
4		—		—	50 ml	9
5		—		—	50 ml	10
6		—		—	50 ml	11
↓ 8		—		—	50 ml	12
9708327-14		—		—	50 ml	CHLOR 13
9708320-1		—		—	50 ml	14
10		—		—	50 ml	15
2		—		—	50 ml	16
3		—		—	50 ml	17
4		—		—	50 ml	18
5		—		—	50 ml	19
6		—		—	50 ml	20
↓ 8		—		—	50 ml	21
9708327-14		—		—	50 ml	V
9708405-01		—		—	50 ml	22
9708396-02		—		—	50 ml	23
9708367-1		—		—	50 ml	24
15		—		—	50 ml	✓ 25
10		—		—	50 ml	26
↓ 2	↓	↓	↓	↓	50 ml	27
PBW		—	—	—	50 ml	CHLOR 28
NA	—	—	—	—	50 ml	→
NA	—	—	—	—	50 ml	→

Secondary Review By: J. Mack Date: 9/3/97

Industrial & Environmental Analysts, Inc. Internal Chain of Custody Form for Metals Date 8.25.97 Location Holiday Inn, Page 1 of 1

# 1364-2026

Industrial & Environmental Analysts, Inc. Internal Chain of Custody

Form for Metal

Date 8.25.92

## Location

Page \_\_\_\_ of \_\_\_\_

1364-dabDP JERAS J.O. 1  
 Internt & Environmental Analysts, Inc. Internal Chain of Cu. Quality Form for Metals Date 8-26-97 Location Mo 5 Page of

IBA Sample Number	Client ID	Matrix	Bottle	Signature	Date	Time	Signature	Date	Time
PBW	PBW	H <sub>2</sub> O	10ml	V.Griffith	8-26-97	2300	L.WW	8-28-97	0700
UOW	UOW								
9X55367-0115	ECC11WFS								
-0180	FO								
-01F									
-02F	WDF								
.04F	SWR								

1/6 8/26/97

Industrial & Environmental Analysts, Inc. Internal Chain of Body Form for Metals

Date 8-26-91

Location M-15 Page c

Industrial & Environmental Analysts, Inc. Internal Chain of Custody Form for Cyanide Date 8-27-97 Location 11024 Page 1 of 2



Method: 8240 CLP 624 Other: M691, 8260LC, + N691

Matrix: Water/Med Soil

Water Curve: N/A Soil Curve:

# GC/MS Volatile Runlog

## Instrument-MSD5

 EM: 2006  
 Batch: 770828E

Filename	AEN Sample ID.	Case #	Date	Time	ALS#	Init/Final Vol.	DF	pH<2	Dilution Prep/Comment	IS-	Surr	Analyst	Rerun
0828E0F	BFB TUNE 50mL	/	8/28/91	2021	16	25mL	/	-	MET 8260LC, M691, + N691	/	/	DWC	✓
0828E01	VSTD001	/	8/28/91	20:56	16	25mL	/	-	"M" = M691 "N" = N691	/	/	DWC	✓
0828E02	VSTD002	/	8/28/91	21:33	16	25mL	/	-		/	/	DWC	✓
0828E03	VSTD003FOOT	8/28/91	8/28/91	22:09	16	25mL	/	-		/	/	DWC	✓
0828E04	VSTD010	8/28/91	8/28/91	22:46	16	25mL	/	-		/	/	DWC	✓
0828E05	VSTD020	8/28/91	8/28/91	23:22	16	25mL	/	-		/	/	DWC	✓
0828E06	VSTD025	8/28/91	8/28/91	23:59	16	25mL	/	-	MET 8260 met 691	/	/	DWC	✓
0828E07	VSTD001	8/29/91	1:20	16	25mL	/	-		CO	/	/	DWC	-
													Σ 8.694 →

Tunes: / Surr Fail: / IS Fail: / Tot Inj: / Suc Inj: / Billable: /

Secondary Review by: \_\_\_\_\_ Date: \_\_\_\_\_

## Water/Curve/Drift/Corr/Soln/Curve

Filename	ABN Sample ID.	Case #	Date	Time	ALSI	Init/Final Vol.	DP	pH < 2	Dilution Prep/Comment	IS-	Buff	Analyst	Run
0822S1F	BFB TUNE SWY		8/12/11	8:19	1L	251 251	-	-		NP	→	S	✓
0822S01	VSTD005		8/12/11	9AM	1L	251	-	-		IN	→	S	✓
0822S02	VBLKST		8/12/11	10:16	1L	251	sm	-		IN	IN	S	✓
0822S03	0 VBLKST		8/12/11	10:52	1L	251	sm	-		IN	IN	S	✓
0822S04	970836701	1364	8/12/11	11:45	1	251	sm	✓		IN	IN	S	✓
0822S05	VIBLKST		8/12/11	12:52	2	251	sm	-		IN	IN	S	✓
0822S06	970836701MS	1364	8/12/11	12:59	3	251	sm	✓		IN	IN	S	✓
0822S07	970836701MS		8/12/11	13:36	4	251	sm	✓		IN	IN	S	✓
0822S08	VIBLKST		8/12/11	14:13	5	251	sm	-		IN	IN	S	✓

Tunes: \_\_\_\_\_ Surr Fail: \_\_\_\_\_ IS Fail: \_\_\_\_\_ Tot Inj: \_\_\_\_\_ Suc Inj: \_\_\_\_\_ Billables: \_\_\_\_\_

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_

Method: 8240 CLP 624 Other: M691 + 8260CC

# GC/MS Volatile Runlog

## Instrument-MSD5

Matrix: Water/Med SoilWater Curve: 0824YE Soil Curve: \_\_\_\_\_EM: 2000  
Batch: 97082915

Filename	AEN Sample ID.	Case #	Date	Time	ALS#	Init/Final Vol.	D <sup>n</sup>	pH<2	Dilution Prep/Comment	IS-	Surr	Analyst	Rerun
0829EBF	BFB TUNE SO <sub>2</sub>	/	8/29/97	2023	16	25ml	/	-	met M691 + 8260CC	/	/	DWC	✓
0829E01	UST005	/	8/29/97	2058	16	25ml	/	-	"M" = M691 met M691 + 8260CC	/	/	DM	✓
0829E02	UBLK51	/	8/29/97	2157	16	25ml	1x	-	"M" = M691	IN	IN	DM	✓
0829E03	970839203	1364- 227	8/29/97	2251	1	25ml	800X	✓		IN	IN	DM	✓
-04	↓ -04	↓	8/29/97	2328	2		1,800X			IN	IN		✓
-05	970850104	1909- 256	8/30/97	0105'	3		1x			IN	IN		✓
-06	↓ -04	↓		0142	4					IN	IN		✓
-07	970826521	196- 079		1:18	5					IN	IN		✓
-08	↓ -21	↓	↓	1:55	6	↓	↓	↓		IN	IN	↓	✓

Tunes: 1 Surr Fail:    IS Fail:    Tot Inj:    Suc Inj:    Billables:   

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_

Method: 8240 CLP 624 Other: 1621 + 52604

Matrix: WaterMed Soll

Water Curve: 08285 Soil Curve: \_\_\_\_\_

# **GC/MS Volatile Runlog**

## **Instrument-MSD5**

EM: 2000  
Batch: 970821E

Tunes: / Sure Fall: IS Fall: Tot Inf: Soc Inf: Billables:

**Secondary Review By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Walter W. McDaniel

Water Cycles: [Activity](#)

## **Soil Curve:**

Digitized by srujanika@gmail.com

Tunes: \_\_\_ / Surr Fail: \_\_\_ IS Fail: \_\_\_ Tot Inj: \_\_\_ Suc Inj: \_\_\_ Billables: \_\_\_

**Secondary Review By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Page 20 of 20  
AEN Logbook# MS11

**Contract Lab Protocol (CLP)**  
**Organic Sample Preparation Log**  
 Retraction of Water Samples for BNA's by Continuous Extraction

IEA Sample #	Extractor Number	Volume Extracted (ml)	Initial Volume (ml)	Matrix Spike Volume (ml)	Initial pH	Final pH	Final Extract Volume (ml)	Extraction Comments	GC/MS				
									GC/MS Run#	Date (dd/mm)	Test Date	File ID.	Comments
SLK57	A	1000	500	n/a	7	22	1.0	Method Blank	CA 57 P.D.G.				
M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Method Blank		10/22/97			
9708367 - 01ms	A	1000	500	1000	7	22	1.0	Matrix Spike		62			
01ms0				↓				Matrix Spike Duplicate		73			
01				n/a						84			
02				↓						9	↓		
SLCS 57				1000	↓	↓	↓			10			
8-22-97													
IEA Case #	1364-226							Ext. Start	8-21-97	R.C.	GC/MS Receipt	Received	10/22/97
Test Name	CLP-BNA Extractions							Ext. End	8-22-97	R.C.	GC/MS Completion		
Test Codes	ESVE01, ESVE03							GC Screen			GC/MS Spec. Review		
Applicable SOP	SFS03400.NC							Prop. Spec. Review	8/22/97	SB			
Analyst													22

Method: 8270 CLP 625 Other: \_\_\_\_\_

Injection Volume: 2μl

**GC/MS Semi-Volatile Runlog**  
**Instrument-MSD6**

EM: \_\_\_\_\_

1906Curve: CLP 8270 625 \_\_\_\_\_

Batch: \_\_\_\_\_

1709186.B

R	Filename	IEA Sample ID.	A	CLP ID.#	Case #	Date	Time	DF	Dilution Preparation/Comment	IS. OK	Surr.OK	Analyst
										Y	N	
✓	09186DFT	50NGDPTPP		DFTPP		09/18/97	0946	—	SVUP631	NA		DAVIAKRE
	09186DF1	↓	✓	↓			1007	—	↓	NA		→
	0918601	SSTD0406M	✓	UP691/MDCO			1024	—	SVUP621-D	NA		→
	0918602	SSTD1606M	✓				1117	—	SVUP621-A	NA		→
	0918603	SSTD0106M	✓				1203	—		NA		→
	0918604	SSTD0206M	✓				1250	—		NA		→
	0918605	SSTD1006M	✓	↓			1336	—	↓	NA		→
	0918606	SSTD0506N	✓	APPENDIX IX			1422	—	SVUP619-D	NA		→
	0918607	SSTD1606N	✓				1508	—	SVUP619-A	NA		→
	0918608	SSTD0206N	✓				1554	—		NA		→
	0918609	SSTD1206N	✓				1640	—		NA		→
	0918610	SSTD0806N	✓	↓		↓	1726	—	↓	NA		→
	0918611	SSTD05060		APPX ADDN			DNI	—	SVUP620-D	NA		→
	0918612	SSTD16060		↓			—	—	SVUP620-A	NA		→
	0918613	SSTD02060					—	—		NA		→
	0918614	SSTD12060					—	—		NA		→
	0918615	SSTD08060		↓			↓	—		NA		→ ↓

DIAVIAKRE

Tunes: 1 Surr Fail:    IS Fail:    Tot Inj:    Suc Inj:    Billable:   

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_

124

Method: 8270 CLP 625 Other: \_\_\_\_\_  
 Injection Volume: 2μL

**GC/MS Semi-Volatile Runlog**  
**Instrument-MSD6**

EM: 1894

Curve: CLP 8270 625 \_\_\_\_\_

Batch: 9709196.B

R	Filename	IGA Sample ID.	A	CLP ID.#	Case #	Date	Time	DF	Dilution Preparation/Comment		IS, OK	Surr.OK	Analyst
									Y	N			
✓	09196DFT	50NG DFTPP		DFTPP		09/19/97	0802	—	SURP637	NA			DAWNEAR
✓	09196DF1			↓			0817	—		NA			
	09196DF2		✓	↓			0833	—		NA			
	0919601	SS100406P	✓	UP601/MU60			0849	—		NA			
	0919602	SS100506Q	✓	APPENDIX IX			0937	—		NA			
	0919603	SS100506R		APPX APPN			1024	—		NA			
	0919604	SBUK57	✓	UP601/MU60			1116	—		✓	✓		
IX	0919605	SLCS57					1203	—	SIMULATES, IS#6 FAIL	✓	✓		
	0919606	970836701	✓				1250	—		✓	✓		
	0919607	970836702	✓				1337	—		✓	✓		
	0919608	970836701MS	✓				1424	—		✓	✓		
	0919609	970836701MS0	✓				1512	—		✓	✓		
	0919610	SLCS57	C				1624	—	CONFIRMS/SIM LOW	✓	✓		
	0919611	Mech WASH	✓	↓			1711	—		NA	NA		

Tunes:    Surr Fail:    IS Fail:    Tot Inj:    Suc Inj:    Billables:   

Secondary Review By:    Date:

# STANDARDS PREPARATION LOGBOOK

Standard Name: L/C(691) LCS SPiking Soln

Location: N/A

Lot Code #: SKUP586

Solvent Used: METHANOL

Volume of Solvent Used:

Prepared By:

Date Prepared:

Expiration Date:

Charged, Chem

03/07/97

03/07/97

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/ml)	Amt/ Added (ml)	Final Vol (ml)
1. L/C ACID LCS MIX	RESTEK	A007492		2,000	1.0	50.0
2. L/C BN LCS MIX A		A005469		1,000		
3. L/C BN LCS MIX B	✓	A005471		2,000	✓	
4. METHANOL	BAXTER(BTJ)			—	47.0	✓
5.	Cat.#31212	L/C Acid Lab Control Sample				
	Lot# A007492	Expires: 7/98 Mad: 8/96 Store @ 4 C				
6.		2000 ug/ml each in methanol				
7.	FOR LABORATORY USE ONLY					
8.	Cat.#31241B	L/C B/N Lab Control Sample B				
	Lot# A005471	Date Made 8/95 Store @ 4 C				
9.		2000 ug/ml in methylene chloride/methanol (6:1)				
10.	FOR LABORATORY USE ONLY					
	Restek Corporation • 110 Benner Circle • Bellefonte, PA 16823					
	Cat.#31241A	L/C B/N Lab Control Sample A				
	Lot# A005469	Date Made 8/95 Store @ 4 C				
		1000 ug/ml each in methylene chloride/methanol (6:1)				
	FOR LABORATORY USE ONLY					

FINAL CONC  
(ug/ml)

40.0

20.0

40.0

Standard	Stock Lot #	Volume	(ug/ml)	Volume	Final Conc	Final Vol
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

## CALCULATIONS

Comments: \_\_\_\_\_

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_

Page 76 of 100  
IEA Logbook# QA127E

## STANDARDS PREPARATION LOGBOOK

Standard Name: SV APPENDIX IX CHLORINATION STOCKS + OLS STD  
Location: RTIALot Code #: STUP619  
Solvent Used: MeOH  
Volume of Solvent Used:Prepared By: Wang, Hui  
Date Prepared: 07/11/97  
Expiration Date: 01/09/98

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/ml)	Amount Added	Final Vol
1. US-111	ULC/RTIA	J-0493	N/A	2,000	1.0	10.0
2. US-113		K-0395				
3. US-114		L-0374				
4. US-115		J-0856				
5. US-116		K-0095				
6. US-117		K-0355				
7. US-118		J-2258				
8. US-119		K-1058				
9. US-120A	↓	K-0809				
10. MeOH	Baek (BTS)	B0833	✓	—	↓	↓

STUP619-A

Prepared By: Wang, Hui  
Date Prepared: 07/11/97  
Expiration Date: 10/11/97

Standard	Stock Lot #	Stock Volume (μL)	Stock Conc (ug/ml)	Solvent Volume (μL)	(μL) Final Conc	Final Vol
1. STD1020 SV APPENDIX IX STOCK	STUP619	50	200	900	10	1.0*
2. ↓ AMINE	STUP617	↓		—	↓	↓
3. STD1050 SAME	STUP619	125		750	25	1.0*
4. ↓	STUP617	↓		—	↓	↓
5. STD1020	STUP619	200		600	40	1.0*
6. ↓	STUP617	↓		—	↓	↓
7. STD1020	STUP619	300		400	60	1.0*
8. ↓	STUP617	↓		—	↓	↓
9. STD1060	STUP619	200		100	80	0.5*
↓	STUP619	↓		—	↓	↓

CALCULATIONS

\* 10 μL of SV INTERNAL STD MIX  
(STUP623) ADDED TO 1.0 mL FINAL VOLUME  
5 μL TO 6.5 mL FINAL VOLUME

Comments: \_\_\_\_\_

Secondary Review By: D. Malone Date: 7/11/97

30

# STANDARDS PREPARATION LOGBOOK

Standard Name: BNA AMENMAX EX (MT. UL STD (SSTB50))

Location: RIA

RIA

SHUNG-M-D

四百一

Solvent Used:

Prepared By:

Date Prepared:

**Expiration Date:**

Prepared By:  
Date Prepared:  
Expiration Date

Chayhle 04/18/97  
09659

## CALCULATIONS

OP-1F SW INTERNAL STD MIX

(SILVER) WAS ADDED TO 1.0ML PIPET VOLUME.

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_ EO

# STANDARDS PREPARATION LOGBOOK

Standard Name: UP(41) INITIAL ACQUISITION STD

Location: RITA

Lot Code #: STUP621-A  
Solvent Used: Methyl  
Volume of Solvent Used:

Prepared By: Chang Hwang  
Date Prepared:  
Expiration Date:

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/ml)	Amt Added	Final Vol
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Prepared By: Chang Hwang  
Date Prepared: 07/04/97  
Expiration Date: 10/09/97

Standard	Stock Lot #	Stock Volume (uL)	Stock Conc (ug/ml)	Solvent Volume (uL)	(uL/uL)	Final Conc	Final Vol (uL)
1. SSTD010	STUP618	25	200	911.5	5	1.0*	
2.	A704102	7.5	2,000	—	↓	↓	
3. SSTD020	STUP618	50	200	930	10	1.0*	
4.	A704102	20	2,000	—	↓	↓	
5. SSTD040	STUP618	100	200	870	20	1.0*	
6.	A704102	30	2,000	—	↓	↓	
7. SSTD100	STUP618	250	200	725	50	1.0*	
8.	A704102	25	2,000	—	↓	↓	
9. SSTD160	STUP618	400	200	580	80	1.0*	

 **AccuStandard Inc.**

A704102

20

2,000

Science Park • New Haven, CT 06511  
Phone 203-442-6290 • 203-785-6290

1 mL

\* 10 uL of SV  
INTERMIXED  
(STUP623) ADDED  
TO EACH 10uL VOLUME.

S-1127  
Custom Semi-Volatile Mix  
2.0 mg/mL in CH<sub>2</sub>Cl<sub>2</sub>  
Lot A7040102  
Exp. 5-1-98

Storage: AMBIENT  
9 comps.

MADE IN THE USA

For Research Use Only

Comments:

Secondary Review By: D. P. Malone Date: 7/11/97

32

Page \_\_\_\_\_ of 100  
IEA Logbooks QA127F

# **STANDARDS PREPARATION LOGBOOK**

Standard Name: Open Continuous AC STD (SS10040)

Location: RIA

Used: Acetone  
of Solvent Used:

Prepared By: \_\_\_\_\_  
Date Prepared: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_

Prepared By: Wade L.  
Date Prepared: 04/18/97  
Expiration Date: 09/05/97

## CALCULATIONS

10µL OF SV INTERNAL STD MIX  
(STEP 64) WAS ADDED TO 1.0mL FINAL VOLUME.

**Secondary Review By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## STANDARDS PREPARATION LOGBOOK

Standard Name: SHINTERAL STD MIX

Location: RIA

SLIP623

Lot Code #: Melch  
Solvent Used:Prepared By: \_\_\_\_\_  
Date Prepared: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_

Volume of Solvent Used:

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/ml)	Amt Added	Final Vol
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Prepared By: Umesh 07/04/97  
Date Prepared: \_\_\_\_\_  
Expiration Date: 10/04/97

Standard	Stock Lot #	Stock Volume (uL)	Stock Conc (ug/ml)	Solvent Volume (uL)	(uL)	Final Conc	Final Vol (uL)
1. SHINTERAL STD MIX	C-394-06	1,580	4,000	—	2,000	3,160	
2. Melch	B0833	—	—	1,580	—	—	—
3.							
4.							
5.							
6.							
7.							
8.							
9.							

CALCULATIONS

Comments: \_\_\_\_\_

Secondary Review By: D. O'Meara Date: 7/17/97

35

Page 35 of 100  
IEA Logbooks QAI27F

## STANDARDS PREPARATION

Standard Name: UPLC1 SURROGATE STD SURVEY SON  
Location: N/A

SLUR632

Lot Code #: METHANOL  
Solvent Used: METHANOL  
Volume of Solvent Used:Prepared By: George H. Van  
Date Prepared: 08/06/97  
Expiration Date: 02/16/98FINAL CONC  
(kg/L)

40.0

40-120.0

—

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/ml)	Amt (mL) Added	Final Vol (mL)
1. LC BN SURROGATE MIX	RESTEK	A007345 A008876	—	1,000	2.0	50.0
2. LC ACID SURROGATE MIX	↓	A007491 A008876	—	3,000, 1,000	2.0	—
3. METHANOL	BADER(B+J)	BL764	—	—	46.0	↓
4.						
5.	Cat.#31207 L/C Acid Surrogate Mix					
6.	Lot# A008876 Expires:5/2000 Made:5/97 Store @ 4 C					
7.	1000 - 3000 ug/ml in methanol					
8.	FOR LABORATORY USE ONLY					
9.	Restek Corporation • 110 Benner Circle • Bellefonte, PA 16823					
10.	Cat.#31024 SV B/N Surrogate Mix (4/89)					
	Lot# A008386 Expires:3/2000 Made:3/97 Store @ 4 C					
	1000 ug/ml each in methylene chloride					
	FOR LABORATORY USE ONLY					
	Restek Corporation • 110 Benner Circle • Bellefonte, PA 16823					



Stock	Cat.#31024 SV B/N Surrogate Mix (4/89)	Lot# A007345 Expires:7/99 Made:7/96 Store @ 4 C	1000 ug/ml each in methylene chloride	FOR LABORATORY USE ONLY	Final Conc	Final Vol
1.	Restek Corporation • 110 Benner Circle • Bellefonte, PA 16823					
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

CALCULATIONS

Comments: \_\_\_\_\_

Secondary Review By: \_\_\_\_\_ Date: \_\_\_\_\_

Page 49 of 100  
IEA Logbook# QA127F

# STANDARDS PREPARATION LOGBOOK

Standard Name: GCMS Tuning Std.  
Location: R11A

Lot Code #: SVCP 637  
Solvent Used: MeCl<sub>2</sub>  
Volume of Solvent Used: ~25 mL

Prepared By:  
Date Prepared:  
Expiration Date:

*John DeShane*  
8/26/97  
3/1/98

Stock Name	Vendor	Stock Lot # / Lot Code #	Logbook / Page #	Stock Conc (ug/mL)	(uL) Amt Added	(uL) Final Vol
1. GCMS TUNING STD	AccuStd	125-180	N/A	1000	625	25
2. MeCl <sub>2</sub>	Baxter	BN904	+	-	to volume	↓
3.			-			
4.  AccuStandard Inc.				25 Science Park • New Haven, CT 06511 Phone 203-423-0230 • 203-785-0230	1 mL	
5. M-625-TS-20X						
6. GCMS Tuning Standard for EPA Method 624/625						
7. 1.0 mg/mL in CH <sub>2</sub> Cl <sub>2</sub>						
8. Loc 125-180		Storage: AMBIENT			POISON	
9. Exp. 3-1-98		4 comps.				
10. 				Storage: AMBIENT		
		M-625-TS-20X		4 comps. Date opened		
		Lot 125-180				
		Exp. 3-1-98	1.0 mg/mL in CH <sub>2</sub> Cl <sub>2</sub>			

Prepared By:  
Date Prepared:  
Expiration Date:

Standard	Stock Lot #	Stock Volume	Stock Conc (ug/mL)	Solvent Volume	Final Conc	Final Vol
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

## CALCULATIONS

Comments:

Secondary Review By: *John DeShane* Date: 8/29/97 58

## STANDARDS PREPARATION LOGBOOK

Standard Name: SV INTERNAL STD MIXLocation: RIALot Code #: SVURG64Solvent Used: Methyl

Volume of Solvent Used:

Prepared By:

Date Prepared:

Expiration Date:

**Contract Lab Protocol (CLP)**  
**Organic Sample Preparation Log**

## SEQUENCE HEADER

Sequence : /SEQUENCE/P3082897CLP.SEQ  
Created : Thu Aug 28, 1997 5:50:51 pm  
Updated : Thu Sep 18, 1997 4:07:54 pm  
Instrmnt : HP5890P3

## SUBSEQUENCE HEADER

SUBSEQ # : 1

Method : /METHOD/P3082897CLP.MTH  
Dlg-Prg :  
Parm File :

## SAMPLER PARAMETERS

Number Washes	:	5	Number Pumps	:	5
Syringe Stop	:	1	Start Oven	:	Yes
Post Bottle #	:	0	Post Washes - #1	:	1
Post Washes - #2	:	0	Vol Ratio	:	1.00000

## SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal	%	Lvl
1.	1 SOLV	100.00000	50.00	1	
2.	2 SOLV	100.00000	50.00	1	
3.	3 RESC89	100.00000	50.00	1	
4.	4 PEM1I	100.00000	50.00	1	

## AMOUNTS SPECIFICATION

	Smp Amt
1.	0.00000
2.	0.00000
3.	0.00000
4.	0.00000

## RESULT FILE LIST

	Result Files
1.	/RESULT/P3082897_001.RES
2.	/RESULT/P3082897_002.RES
3.	/RESULT/P3082897_003.RES
4.	/RESULT/P3082897_004.RES

## SUBSEQUENCE HEADER

SUBSEQ # : 2

Method : /METHOD/P3M082897CLP.MTH  
Dlg-Prg :  
Parm File :

## SAMPLER PARAMETERS

Number Washes	:	5	Number Pumps	:	5
Syringe Stop	:	1	Start Oven	:	Yes

Post Washes - #2 : 0

Vol Ratio

: 1.00000

### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal %	Lvl
1.	AR166016	100.00000	50.00	1
2.	AR122116	100.00000	50.00	1
3.	AR123216	100.00000	50.00	1
4.	AR124216	100.00000	50.00	1
5.	AR124816	100.00000	50.00	1
6.	AR125416	100.00000	50.00	1
7.	TOXAPH16	100.00000	50.00	1

### AMOUNTS SPECIFICATION

	Smp Amt
1.	0.00000
2.	0.00000
3.	0.00000
4.	0.00000
5.	0.00000
6.	0.00000
7.	0.00000

### RESULT FILE LIST

#### Result Files

1.	/RESULT/P3082897_005.RES
2.	/RESULT/P3082897_006.RES
3.	/RESULT/P3082897_007.RES
4.	/RESULT/P3082897_008.RES
5.	/RESULT/P3082897_009.RES
6.	/RESULT/P3082897_010.RES
7.	/RESULT/P3082897_011.RES

### SUBSEQUENCE HEADER

SUBSEQ # : 3

Method : /METHOD/P3082897CLF.MTH  
Dig-Prg :  
Parm File :

### SAMPLER PARAMETERS

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal %	Lvl
1.	INDAL89	100.00000	50.00	1
2.	INDBL89-	100.00000	50.00	1
3.	INDAM8Q	100.00000	50.00	1
4.	INDEMOD	100.00000	50.00	1

6.	6	INDBH89	100.00000	50.00	1
7.	7	PIBLK9N - ok	100.00000	50.00	1
8.	8	PEM1J - good	100.00000	50.00	1
9.	9	PIBLK1A	100.00000	50.00	1
10.	10	PEM1T	100.00000	50.00	1
11.	11	PBLK79	3333.33000	50.00	1
12.	12	AMX89MS	4629.63000	50.00	1
13.	13	AMX89MSD	4629.63000	50.00	1
14.	14	AMX89	4629.63000	50.00	1
15.	15	AMY00DL	1.73611E+05	50.00	1
16.	16	AMY00	1.73610E+04	50.00	1
17.	17	PBLK84	100.00000	50.00	1
18.	18	AMX84MS	100.00000	50.00	1
19.	19	AMX84MSD	100.00000	50.00	1
20.	20	AMX66	100.00000	50.00	1
21.	21	PIBLK1B	100.00000	50.00	1
22.	22	INDAMBU	100.00000	50.00	1
23.	23	INDBMBU	100.00000	50.00	1
24.	24	AMX67	100.00000	50.00	1
25.	25	AMX68	100.00000	50.00	1
26.	26	AMX84	100.00000	50.00	1
27.	27	AMX86	100.00000	50.00	1
28.	28	AMX87	100.00000	50.00	1
	28	PBLK92	100.00000	50.00	1
	29	AMX99	100.00000	50.00	1
31.	30	PIBLK1C	100.00000	50.00	1
32.	31	PEM1U	100.00000	50.00	1
33.	32	PBLK91	20.00000	50.00	1
34.	33	PLCS91	20.00000	50.00	1
35.	34	970806503	20.00000	50.00	1
36.	35	PBLK99	3333.33000	50.00	1
37.	36	970806601MS	4051.54000	50.00	1
8.	37	970806601MSD	4051.54000	50.00	1
39.	38	970806601	4051.54000	50.00	1
40.	39	970806602	4038.12000	50.00	1
41.	40	970806603	4273.50000	50.00	1
42.	41	PIBLK5Y	100.00000	50.00	1
43.	42	INDAM5Y	100.00000	50.00	1
44.	43	INDBM5Y	100.00000	50.00	1
45.	44	AR1660SS	100.00000	50.00	1
	45	AR1221SS	100.00000	50.00	1
47.	46	AR1232SS	100.00000	50.00	1
48.	47	AR1242SS	100.00000	50.00	1
49.	48	AR1248SS	100.00000	50.00	1
50.	49	AR1254SS	100.00000	50.00	1
51.	50	TOXAPHSS	100.00000	50.00	1
52.	51	PIBLKSS	100.00000	50.00	1
53.	52	PEMSS	100.00000	50.00	1
54.	53	PIBLK1I	100.00000	50.00	1
55.	54	PEM1I	100.00000	50.00	1
56.	55	PBLK90	100.00000	50.00	1
57.	56	970758306MS	100.00000	50.00	1
58.	57	970758306MSD	100.00000	50.00	1
59.	58	970758101	100.00000	50.00	1
60.	59	970758102	100.00000	50.00	1
61.	60	970758103	100.00000	50.00	1
62.	61	970758104	100.00000	50.00	1
63.	62	970758105	100.00000	50.00	1
64.	63	970758306	100.00000	50.00	1
65.	64	SOLV	100.00000	50.00	1
66.	65	PIBLK2I	100.00000	50.00	1
67.	66	INDAM2I	100.00000	50.00	1
68.	67	INDBM2I	100.00000	50.00	1
69.	68	970760508	100.00000	50.00	1

72.	/1	970760511	100.00000	50.00	1
73.	72	970760512	100.00000	50.00	1
74.	73	970760513	100.00000	50.00	1
75.	74	970760614	100.00000	50.00	1
76.	75	970760615	100.00000	50.00	1
77.	76	SOLU	100.00000	50.00	1
78.	77	PIBLK3I	100.00000	50.00	1
9.	78	PEM2I	100.00000	50.00	1
80.	79	PIBLK1N - good	100.00000	50.00	1
81.	80	PEM2D - good	100.00000	50.00	1
82.	81	PBLK01!	100.00000	50.00	1
83.	82	970836701J	100.00000	50.00	1
84.	83	970836701MS	100.00000	50.00	1
85.	84	970836701MSD	100.00000	50.00	1
86.	85	970836702!	100.00000	50.00	1
87.	86	PLCS01!	100.00000	50.00	1
88.	87	PBLK02	100.00000	50.00	1
89.	88	PLCS02	100.00000	50.00	1
90.	89	DIMS	100.00000	50.00	1
91.	90	DIMSD	100.00000	50.00	1
92.	91	970846013	100.00000	50.00	1
93.	92	PIBLK1P - good	100.00000	50.00	1
94.	93	INDAM8Y - good	100.00000	50.00	1
95.	94	INDBM8Y - good	100.00000	50.00	1
96.	95	PIBLK1Q	100.00000	50.00	1
97.	96	PEM2E	100.00000	50.00	1
98.	97	CLPMS	100.00000	50.00	1
99.	98	GPC1...A	100.00000	50.00	1
100.	99	GPC1...B	100.00000	50.00	1

1364-226

#### AMOUNTS SPECIFICATION

Smp Amt

-----	-----
1.	0.00000
2.	0.00000
3.	0.00000
4.	0.00000
5.	0.00000
6.	0.00000
7.	0.00000
8.	0.00000
9.	0.00000
10.	0.00000
11.	0.00000
12.	0.00000
13.	0.00000
14.	0.00000
15.	0.00000
16.	0.00000
17.	0.00000
18.	0.00000
19.	0.00000
20.	0.00000
21.	0.00000
22.	0.00000
23.	0.00000
24.	0.00000
25.	0.00000
26.	0.00000
27.	0.00000
28.	0.00000
29.	0.00000
30.	0.00000

32. 0.00000  
33. 0.00000  
34. 0.00000  
35. 0.00000  
36. 0.00000  
37. 0.00000  
38. 0.00000  
39. 0.00000  
40. 0.00000  
41. 0.00000  
42. 0.00000  
43. 0.00000  
44. 0.00000  
45. 0.00000  
46. 0.00000  
47. 0.00000  
48. 0.00000  
49. 0.00000  
50. 0.00000  
51. 0.00000  
52. 0.00000  
53. 0.00000  
54. 0.00000  
55. 0.00000  
56. 0.00000  
57. 0.00000  
58. 0.00000  
59. 0.00000  
60. 0.00000  
61. 0.00000  
62. 0.00000  
63. 0.00000  
64. 0.00000  
65. 0.00000  
66. 0.00000  
67. 0.00000  
68. 0.00000  
69. 0.00000  
70. 0.00000  
71. 0.00000  
72. 0.00000  
73. 0.00000  
74. 0.00000  
75. 0.00000  
76. 0.00000  
77. 0.00000  
78. 0.00000  
79. 0.00000  
80. 0.00000  
81. 0.00000  
82. 0.00000  
83. 0.00000  
84. 0.00000  
85. 0.00000  
86. 0.00000  
87. 0.00000  
88. 0.00000  
89. 0.00000  
90. 0.00000  
91. 0.00000  
92. 0.00000  
93. 0.00000  
94. 0.00000  
95. 0.00000

75. 0.00000  
99. 0.00000  
100. 0.00000

## RESULT FILE LIST

### Result Files

-----  
1. /RESULT/P3082897\_012.RES  
2. /RESULT/P3082897\_013.RES  
3. /RESULT/P3082897\_014.RES  
4. /RESULT/P3082897\_015.RES  
5. /RESULT/P3082897\_016.RES  
6. /RESULT/P3082897\_017.RES  
7. /RESULT/P3082897\_018.RES  
8. /RESULT/P3082897\_019.RES  
9. /RESULT/P3082897\_020.RES  
10. /RESULT/P3082897\_021.RES  
11. /RESULT/P3082897\_022.RES  
12. /RESULT/P3082897\_023.RES  
13. /RESULT/P3082897\_024.RES  
14. /RESULT/P3082897\_025.RES  
15. /RESULT/P3082897\_026.RES  
16. /RESULT/P3082897\_027.RES  
17. /RESULT/P3082897\_028.RES  
18. /RESULT/P3082897\_029.RES  
19. /RESULT/P3082897\_030.RES  
20. /RESULT/P3082897\_031.RES  
21. /RESULT/P3082897\_032.RES  
22. /RESULT/P3082897\_033.RES  
23. /RESULT/P3082897\_034.RES  
24. /RESULT/P3082897\_035.RES  
25. /RESULT/P3082897\_036.RES  
26. /RESULT/P3082897\_037.RES  
27. /RESULT/P3082897\_038.RES  
28. /RESULT/P3082897\_039.RES  
29. /RESULT/P3082897\_040.RES  
30. /RESULT/P3082897\_041.RES  
31. /RESULT/P3082897\_042.RES  
32. /RESULT/P3082897\_043.RES  
33. /RESULT/P3082897\_044.RES  
34. /RESULT/P3082897\_045.RES  
35. /RESULT/P3082897\_046.RES  
36. /RESULT/P3082897\_047.RES  
37. /RESULT/P3082897\_048.RES  
38. /RESULT/P3082897\_049.RES  
39. /RESULT/P3082897\_050.RES  
40. /RESULT/P3082897\_051.RES  
41. /RESULT/P3082897\_052.RES  
42. /RESULT/P3082897\_053.RES  
43. /RESULT/P3082897\_054.RES  
44. /RESULT/P3082897\_055.RES  
45. /RESULT/P3082897\_056.RES  
46. /RESULT/P3082897\_057.RES  
47. /RESULT/P3082897\_058.RES  
48. /RESULT/P3082897\_059.RES  
49. /RESULT/P3082897\_060.RES  
50. /RESULT/P3082897\_061.RES  
51. /RESULT/P3082897\_062.RES  
52. /RESULT/P3082897\_063.RES  
53. /RESULT/P3082897\_064.RES  
54. /RESULT/P3082897\_065.RES  
55. /RESULT/P3082897\_066.RES  
56. /RESULT/P3082897\_067.RES

58 : /RESULT/P3082897\_069.RES  
59 : /RESULT/P3082897\_070.RES  
60 : /RESULT/P3082897\_071.RES  
61 : /RESULT/P3082897\_072.RES  
62 : /RESULT/P3082897\_073.RES  
63 : /RESULT/P3082897\_074.RES  
64 : /RESULT/P3082897\_075.RES  
65 : /RESULT/P3082897\_076.RES  
66 : /RESULT/P3082897\_077.RES  
67 : /RESULT/P3082897\_078.RES  
68 : /RESULT/P3082897\_079.RES  
69 : /RESULT/P3082897\_080.RES  
70 : /RESULT/P3082897\_081.RES  
71 : /RESULT/P3082897\_082.RES  
72 : /RESULT/P3082897\_083.RES  
73 : /RESULT/P3082897\_084.RES  
74 : /RESULT/P3082897\_085.RES  
75 : /RESULT/P3082897\_086.RES  
76 : /RESULT/P3082897\_087.RES  
77 : /RESULT/P3082897\_088.RES  
78 : /RESULT/P3082897\_089.RES  
79 : /RESULT/P3082897\_090.RES  
80 : /RESULT/P3082897\_091.RES  
81 : /RESULT/P3082897\_092.RES  
82 : /RESULT/P3082897\_093.RES  
83 : /RESULT/P3082897\_094.RES  
84 : /RESULT/P3082897\_095.RES  
85 : /RESULT/P3082897\_096.RES  
86 : /RESULT/P3082897\_097.RES  
87 : /RESULT/P3082897\_098.RES  
88 : /RESULT/P3082897\_099.RES  
89 : /RESULT/P3082897\_100.RES  
90 : /RESULT/P3082897\_101.RES  
91 : /RESULT/P3082897\_102.RES  
92 : /RESULT/P3082897\_103.RES  
93 : /RESULT/P3082897\_104.RES  
94 : /RESULT/P3082897\_105.RES  
95 : /RESULT/P3082897\_106.RES  
96 : /RESULT/P3082897\_107.RES  
97 : /RESULT/P3082897\_108.RES  
98 : /RESULT/P3082897\_109.RES  
99 : /RESULT/P3082897\_110.RES  
100 : /RESULT/P3082897\_111.RES

#### SUBSEQUENCE HEADER

SUBSEQ # : 4

Method : /METHOD/P3082897CLP.MTH  
Dtg-Prg :  
Parm File :

#### SAMPLER PARAMETERS

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

#### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal %	Lvl
1	1 DTRIV10	100.00000	50.00	1

4.	4	970853414	100.00000	50.00	1
5.	5	PBLK10	100.00000	50.00	1
6.	6	970852801	100.00000	50.00	1
7.	7	970852801MS	100.00000	50.00	1
8.	8	970852801MSD	100.00000	50.00	1
9.	9	PBLK11	100.00000	50.00	1
0.	10	970901606	100.00000	50.00	1
11.	11	PIBLK1S	100.00000	50.00	1
12.	12	INDAM9A	100.00000	50.00	1
13.	13	INDBM9A	100.00000	50.00	1
14.	14	PBLK18	100.00000	50.00	1
15.	15	970908215	100.00000	50.00	1
16.	16	PBLK19	100.00000	50.00	1
17.	17	970910907	100.00000	50.00	1
18.	18	970910907MS	100.00000	50.00	1
19.	19	970910907MSD	100.00000	50.00	1
20.	20	PIBLK1T	100.00000	50.00	1
21.	21	PEM2G	100.00000	50.00	1
22.	22	SOLV	100.00000	50.00	1
23.	23	PIBLK2H	100.00000	50.00	1
24.	24	PEM2U	100.00000	50.00	1
25.	25	970846007	3333.33000	50.00	1
26.	26	970846008	3333.33000	50.00	1
27.	27	970840101	3333.33000	50.00	1
28.	28	970840104	3333.33000	50.00	1
29.	29	970854601	3968.25000	50.00	1
30.	30	SOLV	100.00000	50.00	1
31.	31	970900715	3919.27000	50.00	1
32.	32	SOLV	100.00000	50.00	1
33.	33	970900718	4013.33000	50.00	1
34.	34	970900718MS	4013.33000	50.00	1
35.	35	970900718MSD	4013.33000	50.00	1
36.	36	PIBLK2I	100.00000	50.00	1
37.	37	INDAM9H	100.00000	50.00	1
38.	38	INDBM9H	100.00000	50.00	1
39.	39	PBLK12	3333.33000	50.00	1
40.	40	PBLK03	3333.33000	50.00	1
41.	41	PBLK05	3333.33000	50.00	1
42.	42	PBLK07	3333.33000	50.00	1
43.	43	GPCBLK0910	100.00000	50.00	1
44.	44	970846601	3829.51000	50.00	1
45.	45	970846602	3703.70000	50.00	1
46.	46	970853404	4016.06000	50.00	1
47.	47	970853404MS	4016.06000	50.00	1
48.	48	970853404MSD	4016.06000	50.00	1
49.	49	PIBLK2J	100.00000	50.00	1
50.	50	PEM2U	100.00000	50.00	1
51.	51	970853406	3919.27000	50.00	1
52.	52	970854120	3873.87000	50.00	1
53.	53	PBLK20	3333.33000	50.00	1
54.	54	970910902DL	1.85117E+05	50.00	1
55.	55	970910902	1.85117E+04	50.00	1
56.	56	SOLV	100.00000	50.00	1
57.	57	970910902MSDL	1.85117E+05	50.00	1
58.	58	970910902MS	1.85117E+04	50.00	1
59.	59	SOLV	100.00000	50.00	1
60.	60	970910902MSDDL	1.85117E+05	50.00	1
61.	61	SOLV	100.00000	50.00	1
62.	62	PIBLK2K	100.00000	50.00	1
63.	63	INDAM9I	100.00000	50.00	1
64.	64	INDBM9I	100.00000	50.00	1
65.	65	970910902MSD	1.85117E+04	-50.00	1
66.	66	SOLV	100.00000	50.00	1
67.	67	070010002	3240.25000	50.00	1

69.	69	SOLV	100.00000	50.00	1
70.	70	PIBLK2L	100.00000	50.00	1
71.	71	PEM2W	100.00000	50.00	1
72.	72	SOLV	100.00000	50.00	1
73.	73	SOLV	100.00000	50.00	1
74.	74	PIBLK2M	100.00000	50.00	1
75.	75	PEM2X	100.00000	50.00	1
6.	76	PBLK14	3333.33000	50.00	1
77.	77	970904918	3875.97000	50.00	1
78.	78	970904918MS	3875.97000	50.00	1
79.	79	970904918MSD	3875.97000	50.00	1
80.	80	970904919	3702.33000	50.00	1
81.	81	970904920	3784.46000	50.00	1
82.	82	PBLK16	3333.33000	50.00	1
83.	83	970908207	3963.25000	50.00	1
84.	84	970908207MS	3963.25000	50.00	1
85.	85	970908207MSD	3963.25000	50.00	1
86.	86	970908208	3968.25000	50.00	1
87.	87	PIBLK2N	100.00000	50.00	1
88.	88	INDAM9J	100.00000	50.00	1
89.	89	INDBM9J	100.00000	50.00	1
90.	90	970908209	3875.97000	50.00	1
91.	91	970908210	4016.06000	50.00	1
92.	92	970908211	3873.87000	50.00	1
93.	93	970908212	3545.34000	50.00	1
94.	94	970908213	4059.14000	50.00	1
95.	95	970905401	3921.56000	50.00	1
96.	96	PIBLK2P	100.00000	50.00	1
97.	97	PEM2Y	100.00000	50.00	1
98.	98		100.00000	50.00	1
99.	99		100.00000	50.00	1

#### ...OUNTS SPECIFICATION

	Smp	Amt
1.		0.00000
2.		0.00000
3.		0.00000
4.		0.00000
5.		0.00000
6.		0.00000
7.		0.00000
8.		0.00000
9.		0.00000
10.		0.00000
11.		0.00000
12.		0.00000
13.		0.00000
14.		0.00000
15.		0.00000
16.		0.00000
17.		0.00000
18.		0.00000
19.		0.00000
20.		0.00000
21.		0.00000
22.		0.00000
23.		0.00000
24.		0.00000
25.		0.00000
26.		0.00000
27.		0.00000

20. 0.00000  
31. 0.00000  
32. 0.00000  
33. 0.00000  
34. 0.00000  
35. 0.00000  
36. 0.00000  
7. 0.00000  
38. 0.00000  
39. 0.00000  
40. 0.00000  
41. 0.00000  
42. 0.00000  
43. 0.00000  
44. 0.00000  
45. 0.00000  
46. 0.00000  
47. 0.00000  
48. 0.00000  
49. 0.00000  
50. 0.00000  
51. 0.00000  
52. 0.00000  
53. 0.00000  
54. 0.00000  
55. 0.00000  
56. 0.00000  
57. 0.00000  
58. 0.00000  
59. 0.00000  
60. 0.00000  
61. 0.00000  
2. 0.00000  
3. 0.00000  
64. 0.00000  
65. 0.00000  
66. 0.00000  
67. 0.00000  
68. 0.00000  
69. 0.00000  
70. 0.00000  
71. 0.00000  
72. 0.00000  
73. 0.00000  
74. 0.00000  
75. 0.00000  
76. 0.00000  
77. 0.00000  
78. 0.00000  
79. 0.00000  
80. 0.00000  
81. 0.00000  
82. 0.00000  
83. 0.00000  
84. 0.00000  
85. 0.00000  
86. 0.00000  
77. 0.00000  
.8. 0.00000  
89. 0.00000  
90. 0.00000  
91. 0.00000  
92. 0.00000  
93. 0.00000  
04. 0.00000

6D  
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTESLab Name: IEA-NC Contract: \_\_\_\_\_Labcode: IEANC Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Instrument ID: HP5890P3 Level (x low): low 1 mid 4 high 16GC Column: DB-608 ID: 0.53 (mm) Date(s) Analyzed: 08/29/97 08/29/97

COMPOUND	RT OF STANDARDS			MEAN RT	RT WINDOW	
	LOW	MID	HIGH		FROM	TO
alpha-BHC	15.37	15.37	15.37	15.37	15.32	15.42
beta-BHC	17.66	17.66	17.66	17.66	17.61	17.71
delta-BHC	19.38	19.38	19.38	19.38	19.33	19.43
gamma-BHC (Lindane)	17.27	17.27	17.27	17.27	17.22	17.32
Heptachlor	19.16	19.16	19.16	19.16	19.11	19.21
Aldrin	20.72	20.72	20.72	20.72	20.67	20.77
Heptachlor epoxide	23.14	23.14	23.14	23.14	23.07	23.21
Endosulfan I	24.58	24.58	24.58	24.58	24.51	24.65
Dieldrin	25.70	25.70	25.70	25.70	25.63	25.77
4,4'-DDE	25.40	25.40	25.40	25.40	25.33	25.47
Endrin	26.92	26.92	26.92	26.92	26.85	26.99
Endosulfan II	27.56	27.55	27.55	27.55	27.48	27.62
4,4'-DDD	27.34	27.34	27.34	27.34	27.27	27.41
Endosulfan sulfate	29.11	29.11	29.11	29.11	29.04	29.18
4,4'-DDT	28.40	28.40	28.40	28.40	28.33	28.47
Methoxychlor	31.32	31.32	31.32	31.32	31.25	31.39
Endrin ketone	31.89	31.89	31.89	31.89	31.82	31.96
Endrin aldehyde	28.58	28.57	28.58	28.58	28.51	28.65
alpha-Chlordane	24.52	24.52	24.52	24.52	24.45	24.59
gamma-Chlordane	23.92	23.91	23.92	23.92	23.85	23.99
Tetrachloro-m-xylene	12.02	12.01	12.01	12.01	11.96	12.05
Decachlorobiphenyl	40.03	40.02	40.03	40.03	39.93	40.13

\* Surrogate retention times are measured from Standard Mix A analysis.

Retention time windows are  $\pm 0.05$  minutes for all compounds that elute before Heptachlor epoxide,  $\pm 0.07$  minutes for all other compounds, except  $\pm 0.10$  minutes for Decachlorobiphenyl.

**SEQUENCE HEADER**

Sequence : /SEQUENCE/P2091297CLP.SEQ  
Created : Fri Sep 12, 1997 7:06:40 pm  
Updated : Fri Sep 19, 1997 6:04:19 pm  
Instrmnt : HP5890P2

**SUBSEQUENCE HEADER**

SUBSEQ # : 1

Method : /METHOD/P2091297CLP.MTH  
Dtg-Prg :  
Parm File :

**SAMPLER PARAMETERS**

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

**SAMPLE SPECIFICATION**

Btl	Sample	Dilution	Cal %	Lvl
1.	1 SOLV	100.00000	50.00	1
2.	2 SOLV	100.00000	50.00	1
3.	3 SOLV	100.00000	50.00	1
4.	4 RESC92	100.00000	50.00	1
5.	5 PEM2P	100.00000	50.00	1

**AMOUNTS SPECIFICATION**

	Smp Amt
1.	0.00000
2.	0.00000
3.	0.00000
4.	0.00000
5.	0.00000

**RESULT FILE LIST****Result Files**

1.	/RESULT/P2091297_001.RES
2.	/RESULT/P2091297_002.RES
3.	/RESULT/P2091297_003.RES
4.	/RESULT/P2091297_004.RES
5.	/RESULT/P2091297_005.RES

**SUBSEQUENCE HEADER**

SUBSEQ # : 2

Method : /METHOD/P2M091297CLP.MTH  
Dtg-Prg :  
Parm File :

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

#### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal	%	Lvl
1.	AR166019	100.00000	50.00	1	
2.	AR122119	100.00000	50.00	1	
3.	AR123219	100.00000	50.00	1	
4.	AR124219	100.00000	50.00	1	
5.	AR124819	100.00000	50.00	1	
6.	AR125419	100.00000	50.00	1	
7.	TOXAPH19	100.00000	50.00	1	

#### AMOUNTS SPECIFICATION

	Smp Amt
1.	0.00000
2.	0.00000
3.	0.00000
4.	0.00000
5.	0.00000
6.	0.00000
7.	0.00000

#### RESULT FILE LIST

##### Result Files

1.	/RESULT/P2091297_006.RES
2.	/RESULT/P2091297_007.RES
3.	/RESULT/P2091297_008.RES
4.	/RESULT/P2091297_009.RES
5.	/RESULT/P2091297_010.RES
6.	/RESULT/P2091297_011.RES
7.	/RESULT/P2091297_012.RES

#### SUBSEQUENCE HEADER

SUBSEQ # : 3

Method : /METHOD/P2091297CLP.MTH  
Dig-Prg :  
Parm File :

#### SAMPLER PARAMETERS

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

#### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal	%	Lvl
1	TND0192	100.00000	50.00	1	

1.	3	INDAH9E	100.00000	50.00	1
4.	4	INDBM9E	100.00000	50.00	1
5.	5	INDAH92	100.00000	50.00	1
6.	6	INDBH92	100.00000	50.00	1
7.	7	PIBLK2B- <i>good</i>	100.00000	50.00	1
8.	8	PEM2Q- <i>good</i>	100.00000	50.00	1
9.	9	SOLU	100.00000	50.00	1
10.	10	SOLU	100.00000	50.00	1
11.	11	PIBLK3B- <i>good</i>	100.00000	50.00	1
12.	12	PEM3G- <i>beta-like high</i>	100.00000	50.00	1
13.	13	PBLK01'	100.00000	50.00	1
14.	14	970836701?	100.00000	50.00	1
15.	15	970836701MS?	100.00000	50.00	1
16.	16	970836701MSD?	100.00000	50.00	1
17.	17	970836702?	100.00000	50.00	1
18.	18	PLCS01'	100.00000	50.00	1
19.	19	PBLK10	100.00000	50.00	1
20.	20	970852801	100.00000	50.00	1
21.	21	970852801MS	100.00000	50.00	1
22.	22	970852801MSD	100.00000	50.00	1
23.	23	PIBLK3C- <i>good</i>	100.00000	50.00	1
24.	24	INDAM9P- <i>good</i>	100.00000	50.00	1
25.	25	INDBM9P- <i>good</i>	100.00000	50.00	1
26.	26	TOXAPH22	100.00000	50.00	1
27.	27	AR166022	100.00000	50.00	1
28.	28	AR125422	100.00000	50.00	1
29.	29	AR124822	100.00000	50.00	1
30.	30	AR124222	100.00000	50.00	1
31.	31	AR123222	100.00000	50.00	1
32.	32	AR122122	100.00000	50.00	1
33.	33	PIBLK3D	100.00000	50.00	1
34.	34	PEM3H	100.00000	50.00	1
.	35		100.00000	50.00	1
-6.	36		100.00000	50.00	1
37.	37		100.00000	50.00	1
38.	38		100.00000	50.00	1
39.	39		100.00000	50.00	1
40.	40		100.00000	50.00	1
41.	41		100.00000	50.00	1
42.	42		100.00000	50.00	1
43.	43		100.00000	50.00	1
44.	44		100.00000	50.00	1
45.	45		100.00000	50.00	1
46.	46		100.00000	50.00	1
47.	47		100.00000	50.00	1
48.	48		100.00000	50.00	1
49.	49		100.00000	50.00	1
50.	50		100.00000	50.00	1
51.	51		100.00000	50.00	1
52.	52		100.00000	50.00	1
53.	53		100.00000	50.00	1
54.	54		100.00000	50.00	1
55.	55		100.00000	50.00	1
56.	56		100.00000	50.00	1
57.	57		100.00000	50.00	1
58.	58		100.00000	50.00	1
59.	59		100.00000	50.00	1
60.	60		100.00000	50.00	1
61.	61		100.00000	50.00	1
62.	62		100.00000	50.00	1
63.	63		100.00000	50.00	1
64.	64		100.00000	50.00	1
65.	65		100.00000	50.00	1
66.	66		100.00000	50.00	1
67.	67		100.00000	50.00	1

69.	69	100.00000	50.00	1
70.	70	100.00000	50.00	1
71.	71	100.00000	50.00	1
72.	72	100.00000	50.00	1
73.	73	100.00000	50.00	1
74.	74	100.00000	50.00	1
75.	75	100.00000	50.00	1
6.	76	100.00000	50.00	1
77.	77	100.00000	50.00	1
78.	78	100.00000	50.00	1
79.	79	100.00000	50.00	1
80.	80	100.00000	50.00	1
81.	81	100.00000	50.00	1
82.	82	100.00000	50.00	1
83.	83	100.00000	50.00	1
84.	84	100.00000	50.00	1
85.	85	100.00000	50.00	1
86.	86	100.00000	50.00	1
87.	87	100.00000	50.00	1
88.	88	100.00000	50.00	1
89.	89	100.00000	50.00	1
90.	90	100.00000	50.00	1
91.	91	100.00000	50.00	1
92.	92	100.00000	50.00	1
93.	93	100.00000	50.00	1
94.	94	100.00000	50.00	1
95.	95	100.00000	50.00	1
96.	96	100.00000	50.00	1
97.	97	100.00000	50.00	1
98.	98	100.00000	50.00	1
99.	99	100.00000	50.00	1

#### AMOUNTS SPECIFICATION

Smp Amt

-----
1. 0.00000
2. 0.00000
3. 0.00000
4. 0.00000
5. 0.00000
6. 0.00000
7. 0.00000
8. 0.00000
9. 0.00000
10. 0.00000
11. 0.00000
12. 0.00000
13. 0.00000
14. 0.00000
15. 0.00000
16. 0.00000
17. 0.00000
18. 0.00000
19. 0.00000
20. 0.00000
21. 0.00000
22. 0.00000
23. 0.00000
24. 0.00000
25. 0.00000
26. 0.00000
27. 0.00000
28. 0.00000

30. 0.00000  
31. 0.00000  
32. 0.00000  
33. 0.00000  
34. 0.00000  
35. 0.00000  
36. 0.00000  
7. 0.00000  
38. 0.00000  
39. 0.00000  
40. 0.00000  
41. 0.00000  
42. 0.00000  
43. 0.00000  
44. 0.00000  
45. 0.00000  
46. 0.00000  
47. 0.00000  
48. 0.00000  
49. 0.00000  
50. 0.00000  
51. 0.00000  
52. 0.00000  
53. 0.00000  
54. 0.00000  
55. 0.00000  
56. 0.00000  
57. 0.00000  
58. 0.00000  
59. 0.00000  
60. 0.00000  
61. 0.00000  
2. 0.00000  
63. 0.00000  
64. 0.00000  
65. 0.00000  
66. 0.00000  
67. 0.00000  
68. 0.00000  
69. 0.00000  
70. 0.00000  
71. 0.00000  
72. 0.00000  
73. 0.00000  
74. 0.00000  
75. 0.00000  
76. 0.00000  
77. 0.00000  
78. 0.00000  
79. 0.00000  
80. 0.00000  
81. 0.00000  
82. 0.00000  
83. 0.00000  
84. 0.00000  
85. 0.00000  
86. 0.00000  
7. 0.00000  
8. 0.00000  
89. 0.00000  
90. 0.00000  
91. 0.00000  
92. 0.00000  
93. 0.00000

96. 0.00000  
97. 0.00000  
98. 0.00000  
99. 0.00000

RESULT FILE LIST

Result Files

-----  
1. /RESULT/P2091297\_013.RES  
2. /RESULT/P2091297\_014.RES  
3. /RESULT/P2091297\_015.RES  
4. /RESULT/P2091297\_016.RES  
5. /RESULT/P2091297\_017.RES  
6. /RESULT/P2091297\_018.RES  
7. /RESULT/P2091297\_019.RES  
8. /RESULT/P2091297\_020.RES  
9. /RESULT/P2091297\_021.RES  
10. /RESULT/P2091297\_022.RES  
11. /RESULT/P2091297\_023.RES  
12. /RESULT/P2091297\_024.RES  
13. /RESULT/P2091297\_025.RES  
14. /RESULT/P2091297\_026.RES  
15. /RESULT/P2091297\_027.RES  
16. /RESULT/P2091297\_028.RES  
17. /RESULT/P2091297\_029.RES  
18. /RESULT/P2091297\_030.RES  
19. /RESULT/P2091297\_031.RES  
20. /RESULT/P2091297\_032.RES  
21. /RESULT/P2091297\_033.RES  
22. /RESULT/P2091297\_034.RES  
23. /RESULT/P2091297\_035.RES  
24. /RESULT/P2091297\_036.RES  
25. /RESULT/P2091297\_037.RES  
26. /RESULT/P2091297\_038.RES  
27. /RESULT/P2091297\_039.RES  
28. /RESULT/P2091297\_040.RES  
29. /RESULT/P2091297\_041.RES  
30. /RESULT/P2091297\_042.RES  
31. /RESULT/P2091297\_043.RES  
32. /RESULT/P2091297\_044.RES  
33. /RESULT/P2091297\_045.RES  
34. /RESULT/P2091297\_046.RES  
35. /RESULT/P2091297\_047.RES  
36. /RESULT/P2091297\_048.RES  
37. /RESULT/P2091297\_049.RES  
38. /RESULT/P2091297\_050.RES  
39. /RESULT/P2091297\_051.RES  
40. /RESULT/P2091297\_052.RES  
41. /RESULT/P2091297\_053.RES  
42. /RESULT/P2091297\_054.RES  
43. /RESULT/P2091297\_055.RES  
44. /RESULT/P2091297\_056.RES  
45. /RESULT/P2091297\_057.RES  
46. /RESULT/P2091297\_058.RES  
47. /RESULT/P2091297\_059.RES  
48. /RESULT/P2091297\_060.RES  
49. /RESULT/P2091297\_061.RES  
50. /RESULT/P2091297\_062.RES  
51. /RESULT/P2091297\_063.RES  
52. /RESULT/P2091297\_064.RES  
53. /RESULT/P2091297\_065.RES  
54. /RESULT/P2091297\_066.RES  
55. /RESULT/P2091297\_067.RES

57. /RESULT/P2091297\_069.RES  
58. /RESULT/P2091297\_070.RES  
59. /RESULT/P2091297\_071.RES  
60. /RESULT/P2091297\_072.RES  
61. /RESULT/P2091297\_073.RES  
62. /RESULT/P2091297\_074.RES  
63. /RESULT/P2091297\_075.RES  
64. /RESULT/P2091297\_076.RES  
65. /RESULT/P2091297\_077.RES  
66. /RESULT/P2091297\_078.RES  
67. /RESULT/P2091297\_079.RES  
68. /RESULT/P2091297\_080.RES  
69. /RESULT/P2091297\_081.RES  
70. /RESULT/P2091297\_082.RES  
71. /RESULT/P2091297\_083.RES  
72. /RESULT/P2091297\_084.RES  
73. /RESULT/P2091297\_085.RES  
74. /RESULT/P2091297\_086.RES  
75. /RESULT/P2091297\_087.RES  
76. /RESULT/P2091297\_088.RES  
77. /RESULT/P2091297\_089.RES  
78. /RESULT/P2091297\_090.RES  
79. /RESULT/P2091297\_091.RES  
80. /RESULT/P2091297\_092.RES  
81. /RESULT/P2091297\_093.RES  
82. /RESULT/P2091297\_094.RES  
83. /RESULT/P2091297\_095.RES  
84. /RESULT/P2091297\_096.RES  
85. /RESULT/P2091297\_097.RES  
86. /RESULT/P2091297\_098.RES  
87. /RESULT/P2091297\_099.RES  
88. /RESULT/P2091297\_100.RES  
89. /RESULT/P2091297\_101.RES  
90. /RESULT/P2091297\_102.RES  
91. /RESULT/P2091297\_103.RES  
92. /RESULT/P2091297\_104.RES  
93. /RESULT/P2091297\_105.RES  
94. /RESULT/P2091297\_106.RES  
95. /RESULT/P2091297\_107.RES  
96. /RESULT/P2091297\_108.RES  
97. /RESULT/P2091297\_109.RES  
98. /RESULT/P2091297\_110.RES  
99. /RESULT/P2091297\_111.RES

#### SUBSEQUENCE HEADER

SUBSEQ # : 4

Method : /METHOD/P2091297CLP.MTH  
Dlg-Prg :  
Parm File :

#### SAMPLER PARAMETERS

Number Washes : 5  
Syringe Stop : 1  
Post Bottle # : 0  
Post Washes - #2 : 0

Number Pumps : 5  
Start Oven : Yes  
Post Washes - #1 : 1  
Vol Ratio : 1.00000

#### SAMPLE SPECIFICATION

Btl	Sample	Dilution	Cal %	Lvl
-	-	-	-	-